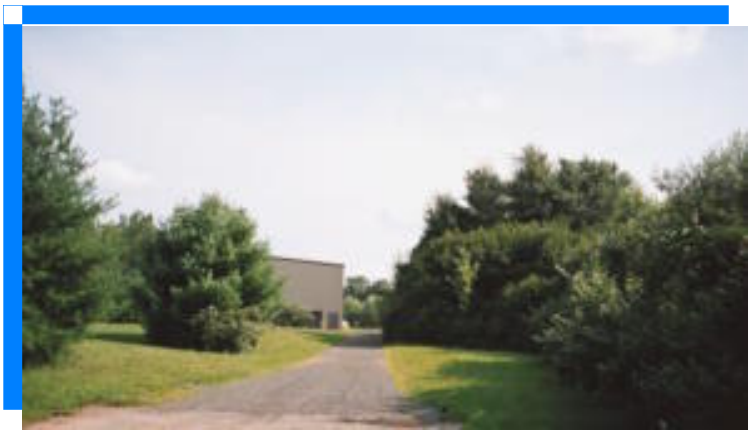


Preliminary Reuse Assessment

Solvents Recovery Service of New England, Inc. Superfund Site

Southington, CT

EPA New England

Office of Site Remediation and Restoration
September, 2003

TABLE OF CONTENTS

PURPOSE OF THIS DOCUMENT

EPA-New England is responsible for the cleanup of over 100 Superfund sites throughout New England. Although protecting human health and the environment is the primary objective of these cleanups, EPA also recognizes the value in helping to return Superfund sites to beneficial reuse. Understanding the current and likely future uses of a site are fundamental to achieving both objectives.

Most importantly, accurate information on the likely uses of a Superfund site and the surrounding area is necessary to make reasonable assumptions about possible exposures to contaminants. These assumptions form the basis for establishing site-specific cleanup levels and, ultimately, for designing a protective remedy. Uncertainty in this information makes it difficult to appropriately tailor the site investigation and cleanup, and oftentimes leads to increased project costs and delays.

From the standpoint of facilitating site reuse, details regarding current or planned uses can enable EPA to consider those uses in the selection, design and implementation of the remedy. For instance, it may be possible to locate a soil or groundwater treatment system so as not to physically restrict the construction of future buildings. In other cases, the cleanup might be phased in a way that allows certain portions of a site to be available sooner. There are numerous Superfund sites across the country where reuse has already been facilitated in this manner. However, such accommodations will only be considered if they do not compromise the protectiveness of the cleanup.

This Reuse Assessment summarizes information on the current and potential future land uses at the Solvents Recovery Services of New England, Inc. Superfund Site that is currently known to the EPA case team. Potential reuse-related issues, data gaps and other relevant considerations are also described.

EPA will continue to work with the local community and other stakeholders to resolve remaining uncertainties and develop a more complete and realistic understanding of site use. This information will be used to support EPA's decisions regarding future response actions at the Site.

The Reuse Assessment is presented in three sections:

- **Section 1 - Site Background**: Describes the physical, environmental, and historical context of the site.

- **Section 2 - Reuse Status**: Describes the current and potential future uses of the separate parcels or discrete areas within the Site. Potential use/reuse considerations relating to these parcels or areas are also discussed.

- **Section 3 - General Findings and Recommendations**: Provides a general summary of relevant findings and potential issues.

QUICK FACTS

Location:	Lazy Lane Hartford County, Connecticut Latitude: +41 deg 37 min 10.57 sec Longitude: -72 deg 52 min 40.9 sec (See Figures 1 & 2)
Site ID No.:	0100124
CERCLIS ID No.:	CTD009717604
Site Area:	42.6 Acres
Number of Parcels:	4
Current Uses:	**Operations Area** - unused **Former Cianci Property** - Plume Extraction System and Treatment Plant, Phytoremediation Pilot Test **Railroad ROW** - unused **Town Well Field** - unused
Ownership:	**Operations Area** and **Former Cianci Property** - Estate of Carlton Boll **Railroad ROW** - Connecticut Department of Environmental Protection **Town Well Field** - Town of Southington
Cleanup Status:	NTCRA 1 implemented NTCRA 2 implemented Feasibility Study in Progress
CERCLIS ID No.:	CTD009717604
EPA Contact:	Karen Lumino (617) 918-1348

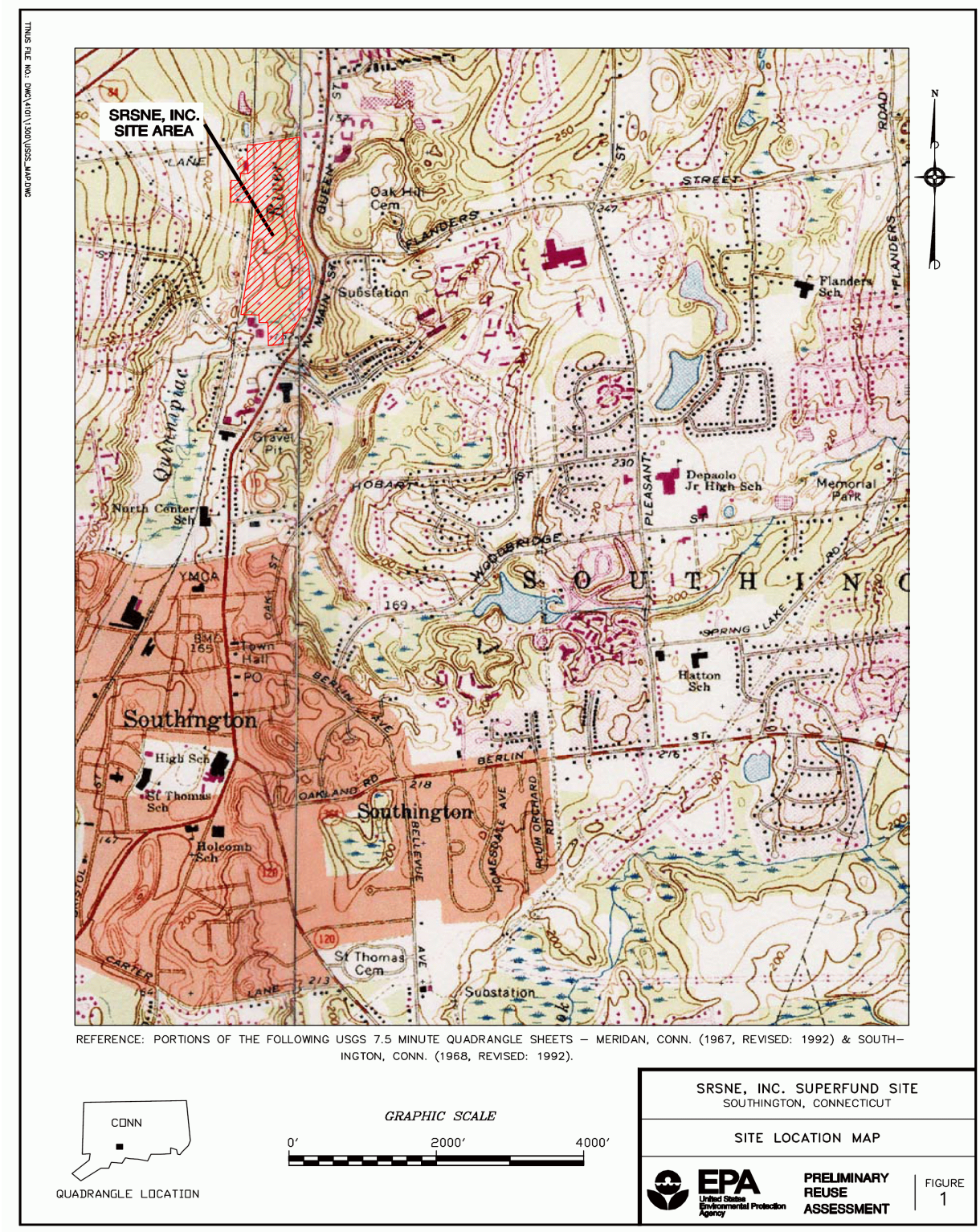
SECTION 1 - SITE BACKGROUND

1.1 General Site Description

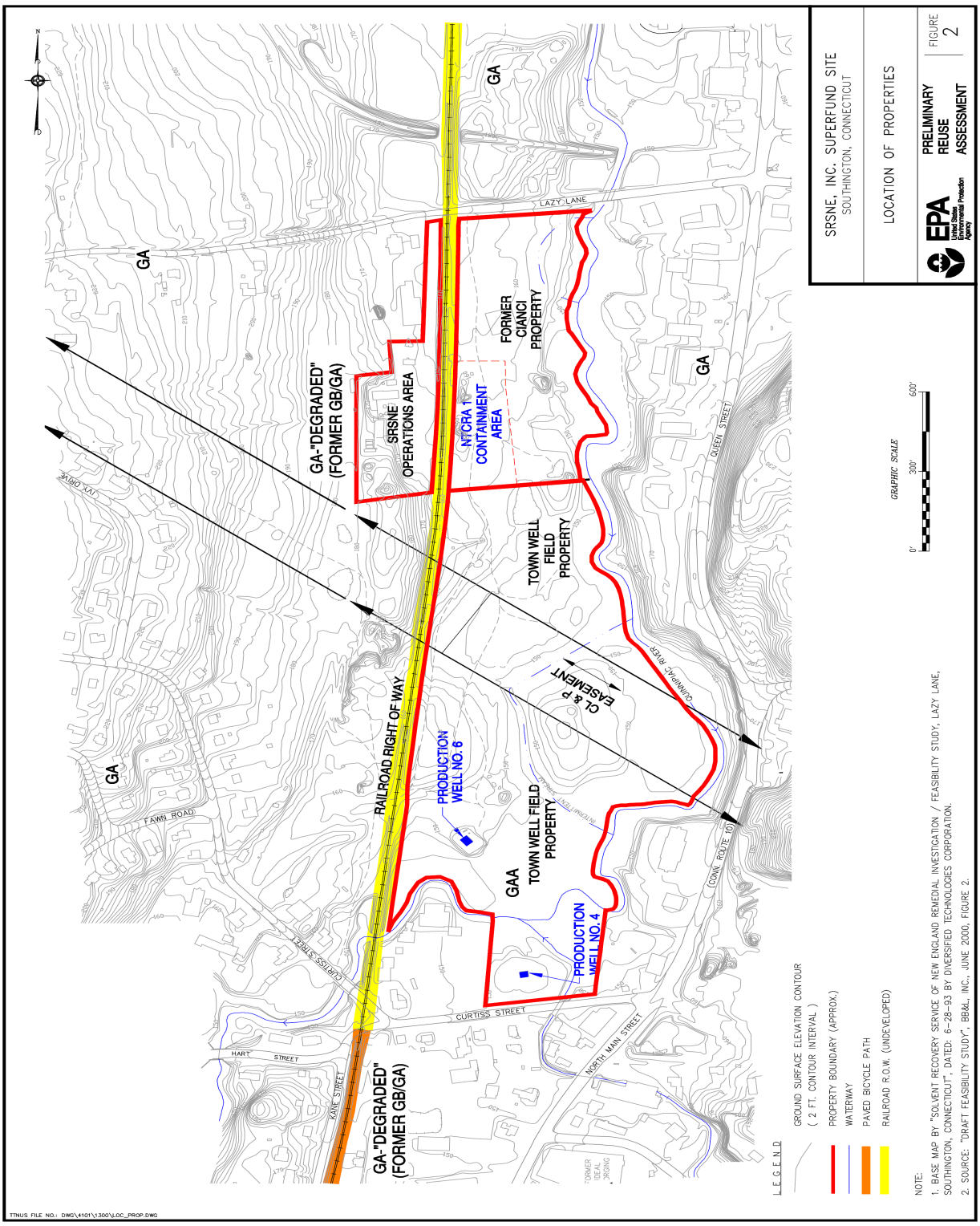
The Solvents Recovery Service of New England (SRSNE) site is located in the Town of Southington, in Hartford County, Connecticut (Figure 1). The SRSNE site is located in central Southington, just west of Route 10 (Queen Street) and the Quinnipiac River. The site is generally defined by the following four parcels: the SRSNE Operations Area (3.7 acres), the former Cianci Property (10.3 acres), the railroad right-of-way (ROW), and the Town of Southington Well Field (28.6 acres) (Figure 2). The final site boundary will be defined in the Record of Decision. Spent solvents released at the Operations Area have resulted in the contamination of that parcel and the adjoining parcels. Currently, the SRSNE Operations Area, the railroad ROW, and the Town Well Field are unused. An active groundwater extraction and treatment system is located on the former Cianci Property parcel. Additional details regarding the current features and land use for each parcel are provided in Section 2.

SRSNE was a spent solvent processing facility that conducted its day-to-day activities within the 3.7 acre Operations Area. The facility operated from about 1955 until 1991, when it closed permanently.

The Site is bounded to the north by Lazy Lane, to the east by the Quinnipiac River, to the south by Curtiss Street, and to the west by privately owned properties. The unused railroad ROW, extending north-south, separates the Operations Area from the former Cianci Property. Only the portion of the railroad ROW abutting the Operations Area was contaminated with past releases from SRSNE.



REFERENCE: PORTIONS OF THE FOLLOWING USGS 7.5 MINUTE QUADRANGLE SHEETS – MERIDAN, CONN. (1967, REVISED: 1992) & SOUTHINGTON, CONN. (1968, REVISED: 1992).


SRSNE, INC. SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
LOCATION OF PROPERTIES
EPA
PRELIMINARY REUSE ASSESSMENT
FIGURE 2
GRAPHIC SCALE
0'
300'
600'
GA
GA-"DEGRADED" (FORMER GB/GA)
SRSNE OPERATIONS AREA
NTCRA 1 CONTAINMENT AREA
FORMER CIANCI PROPERTY
TOWN WELL FIELD PROPERTY
GAA
PRODUCTION WELL NO. 6
PRODUCTION WELL NO. 4
RAILROAD RIGHT OF WAY
CL & P EASEMENT
LAZY LANE
QUEEN STREET
FANN ROAD
CURTISS STREET
HART STREET
KANE STREET
NORTH MAIN STREET
(CONN. ROUTE 10)
QUINNIPIAC RIVER
LEGEND
GROUND SURFACE ELEVATION CONTOUR (2 FT. CONTOUR INTERVAL)
PROPERTY BOUNDARY (APPROX.)
WATERWAY
PAVED BICYCLE PATH
RAILROAD R.O.W. (UNDEVELOPED)
NOTE:
1. BASE MAP BY "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION / FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONNECTICUT", DATED: 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. SOURCE: "DRAFT FEASIBILITY STUDY", BB&L, INC., JUNE 2000, FIGURE 2.
TTNUS FILE NO.: DWG\4101\1300\LOC_PROP.DWG

Topography - Figure 2 provides a plan view of the Operations Area, the railroad ROW, and the former Cianci Property. The SRSNE site is located in the Quinnipiac River Basin and is situated in the flat lowlands in the central portion of the river valley. The Quinnipiac River flows from north to south along the eastern perimeter of the former Cianci Property and the Town Well Field, and turns west in the vicinity of Curtiss Street. Within this portion of the river basin, the Quinnipiac River is flanked to the east and west by hills and terraces. The river valley floor ranges from 146 to 170 feet above mean sea level (MSL) in the vicinity of the SRSNE site.

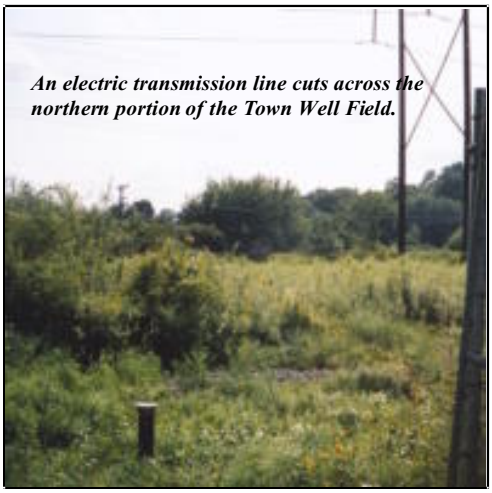
Southern view at entrance to Operations Area.

The Operations Area is located approximately 600 feet west of the river channel. The ground surface elevation ranges from approximately 164 to 180 feet MSL. The majority of the Operations Area where day-to-day activities occurred is generally level, with a slight slope eastward toward the river. A steep hill (maximum elevation of 190 feet MSL) occupies the west and southwest portions of this property. EPIC (1988) aerial photographs indicate that the terrain was altered from a sloping land area to a flat parking and storage area with a steeply cut western embankment. The hillsides on the western portions of the Operations Area are covered with 2-3 inches of crushed stone to stabilize the steep slope. There is a knoll on the southwestern corner of the property, which is vegetated with small trees and brush. Approximately 2.5 acres of this parcel was used by SRSNE for its spent solvents processing activities.

Southern view at entrance to former Cianci Property.

The former Cianci Property is a well-vegetated, level lot characterized by open grassy fields and wetlands. The entire eastern border of the former Cianci Property along the Quinnipiac River is characterized by wetlands. Another wetland is present at the southern boundary of the former Cianci Property and extends into the Town Well Field. Past earth-moving activities have resulted in discrete mounds of earth pushed to the eastern and western edges of the property. Surface elevations range from 150 feet MSL (at the floodplain) to 160 feet MSL near the railroad ROW. The land surface is slightly sloped west to east and north to south.

The railroad ROW is located between the Operations Area parcel and the former Cianci Property parcel, and extends from Lazy Lane (162 feet MSL) southward to Curtiss Street (155 feet MSL). The railroad ROW is approximately 3000 feet in length with a gradual slope. A short bridge is located near Curtiss Street where it crosses the Quinnipiac River.



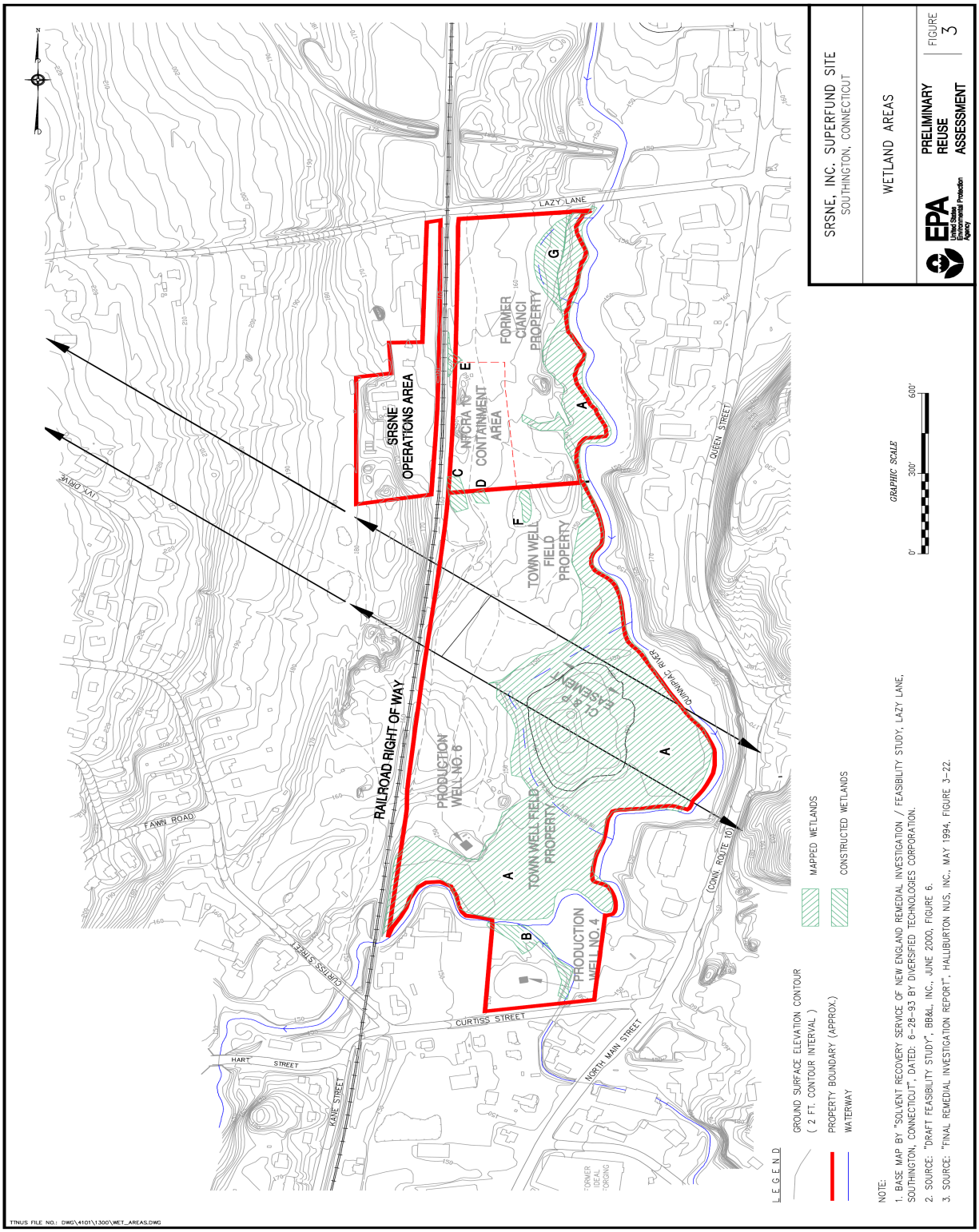
An electric transmission line cuts across the northern portion of the Town Well Field.

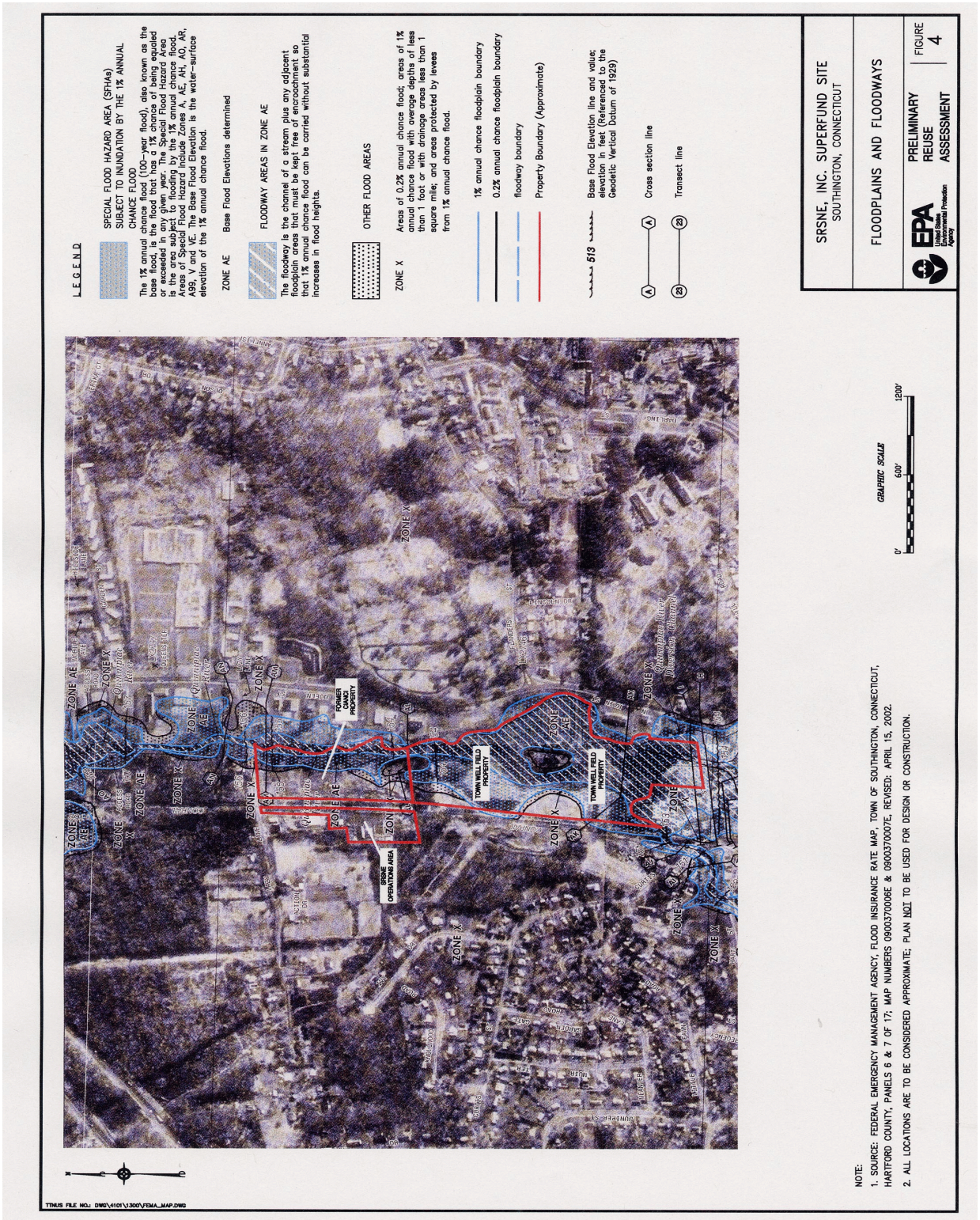
The Town Well Field, situated due south of the former Cianci Property, consists of approximately 28.2 acres of undeveloped land. Town Production Wells 4 and 6 are located approximately 2,000 and 1,400 feet south of the SRSNE property, respectively. The two wells have not been used since 1976 when it was discovered that they were contaminated with volatile organic compounds (VOCs). The Town Well Field is characterized by open grassy fields in gently rolling terrain. Some forested areas and shrubs are present at the boundary between the well field and the former Cianci Property, and along the borders of the wetlands. Wetlands are present proximate to the Quinnipiac River. A seasonal pond/wetland occupies an area encompassing portions of the former Cianci Property and the northern portion of the well field. A Connecticut Light & Power (CL&P) easement for a high tension, electric transmission line cuts across the northern portion of the well field. Ground elevations range between 145 feet MSL (in the floodplain near Well No. 6) and 160 feet MSL at the peak of one hill. The ground surface slopes generally from north to south. (HNUS, 1994; BB&L, 1998)

Wetlands/Floodplains - A wetlands delineation was completed in 1992 by Halliburton NUS, which identified a network of wetlands that border the Quinnipiac River. The typical wetland within the area is palustrian, forested-scrub/shrub, generally dominated by broad-leaved trees and shrubs. These wetlands are usually seasonally flooded or saturated. Figure 3 depicts the wetlands extent. The delineated wetlands are situated on the eastern boundary of the former Cianci Property, and along the eastern and southern perimeter of the Town Well Field.

Portions of the site reside in the floodplains and floodway of the Quinnipiac River (Figure 4). Floodplains and floodway border the Quinnipiac River's western and eastern banks. Floodplains and floodway occur along the eastern perimeter of the former Cianci Property. A greater portion of the southern half of this parcel is situated in floodplains. The floodplains consist of Special Flood Hazard Area Zone AE (1% annual chance flood) and Other Flood Area Zone X (areas of 0.2% annual chance flood). The floodway is designated Zone AE, which must be kept free of encroachments to accommodate the 1% annual chance flood. The base flood elevation varies from 155 feet MSL to 154 feet MSL within the former Cianci Property. Most of the Town Well Field parcel is located in Zone AE and Zone X floodplains and floodway, where the base flood elevation is 154 feet MSL.

Groundwater - In the Operations Area, the overburden aquifer consists of stratified, silty-fine sands and silty gravels. The bedrock is approximately 15 feet below ground surface (in the level portions of the parcel) while depth to groundwater ranges from 2 to 10 feet below ground surface. In the former Cianci Property, the overburden consists of moraine and valley train deposits with discontinuous semi-confining layers, and the depth to bedrock ranges from 25 to 45 feet below ground surface. Depth to groundwater ranges from 0 to 6 feet seasonally. In the Town Well Field, the overburden consists of layered sand and gravel with depth to bedrock ranging from 70 to over 100 feet. The depth to groundwater in this parcel ranges from 0 to 15 feet. (HNUS, 1994)


SRSNE, INC. SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
WETLAND AREAS
EPA United States Environmental Protection Agency
PRELIMINARY REUSE ASSESSMENT
FIGURE 3
SRSNE OPERATIONS AREA
INTERIM CONTAINMENT AREA
FORMER CIANCI PROPERTY
TOWN WELL FIELD PROPERTY
PRODUCTION WELL NO. 6
PRODUCTION WELL NO. 4
RAILROAD RIGHT OF WAY
LAZY LANE
QUEEN STREET
FAWN ROAD
CURTISS STREET
HART STREET
KANE STREET
NORTH MAIN STREET
CONN. ROUTE 10
QUINNIPIAC RIVER
A
B
C
D
E
F
G
GRAPHIC SCALE
0'
300'
600'
LEGEND
GROUND SURFACE ELEVATION CONTOUR
(2 FT. CONTOUR INTERVAL)
PROPERTY BOUNDARY (APPROX.)
WATERWAY
MAPPED WETLANDS
CONSTRUCTED WETLANDS
NOTE:
1. BASE MAP BY "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION / FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONNECTICUT", DATED: 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. SOURCE: "DRAFT FEASIBILITY STUDY", BB&L, INC., JUNE 2000, FIGURE 6.
3. SOURCE: "FINAL REMEDIAL INVESTIGATION REPORT", HALLIBURTON NUS, INC., MAY 1994, FIGURE 3-22.
TITNUS FILE NO.: DWG\4101\1300\WET_AREAS.DWG


L E G E N D
SPECIAL FLOOD HAZARD AREA (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
ZONE AE Base Flood Elevations determined
FLOODWAY AREAS IN ZONE AE
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that 1% annual chance flood can be carried without substantial increases in flood heights.
OTHER FLOOD AREAS
ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
floodway boundary
Property Boundary (Approximate)
513
Base Flood Elevation line and value; elevation in feet (Referenced to the Geodetic Vertical Datum of 1929)
A
Cross section line
23
Transect line
SRSNE, INC. SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
FLOODPLAINS AND FLOODWAYS
EPA United States Environmental Protection Agency
PRELIMINARY REUSE ASSESSMENT
FIGURE 4
GRAPHIC SCALE
0'
600'
1200'
FORMER CMMD PROPERTY
SRSNE OPERATIONS AREA
TOWN WELL FIELD PROPERTY
TOWN WELL FIELD PROPERTY
ZONE AE
ZONE X
NOTE:
1. SOURCE: FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP, TOWN OF SOUTHINGTON, CONNECTICUT, HARTFORD COUNTY, PANELS 6 & 7 OF 17; MAP NUMBERS 09003700G6E & 09003700D7E, REVISED: APRIL 15, 2002.
2. ALL LOCATIONS ARE TO BE CONSIDERED APPROXIMATE; PLAN NOT TO BE USED FOR DESIGN OR CONSTRUCTION.
TTNUS FILE NO.: DWG\4101\1300\FEMA_MAP.DWG

The groundwater underlying the Operations Area and the former Cianci Property have been classified by the Connecticut Department of Environmental Protection (CT DEP) as GA-degraded (Figure 5). The GA classification indicates "Existing private and potential public or private supplies of water suitable for drinking without treatment." However, the presence of numerous solvents and chemicals in the subsurface at the Operations Area and the former Cianci Property resulted in the "degraded" designation. The State's goal is to restore the groundwater to drinking water quality.

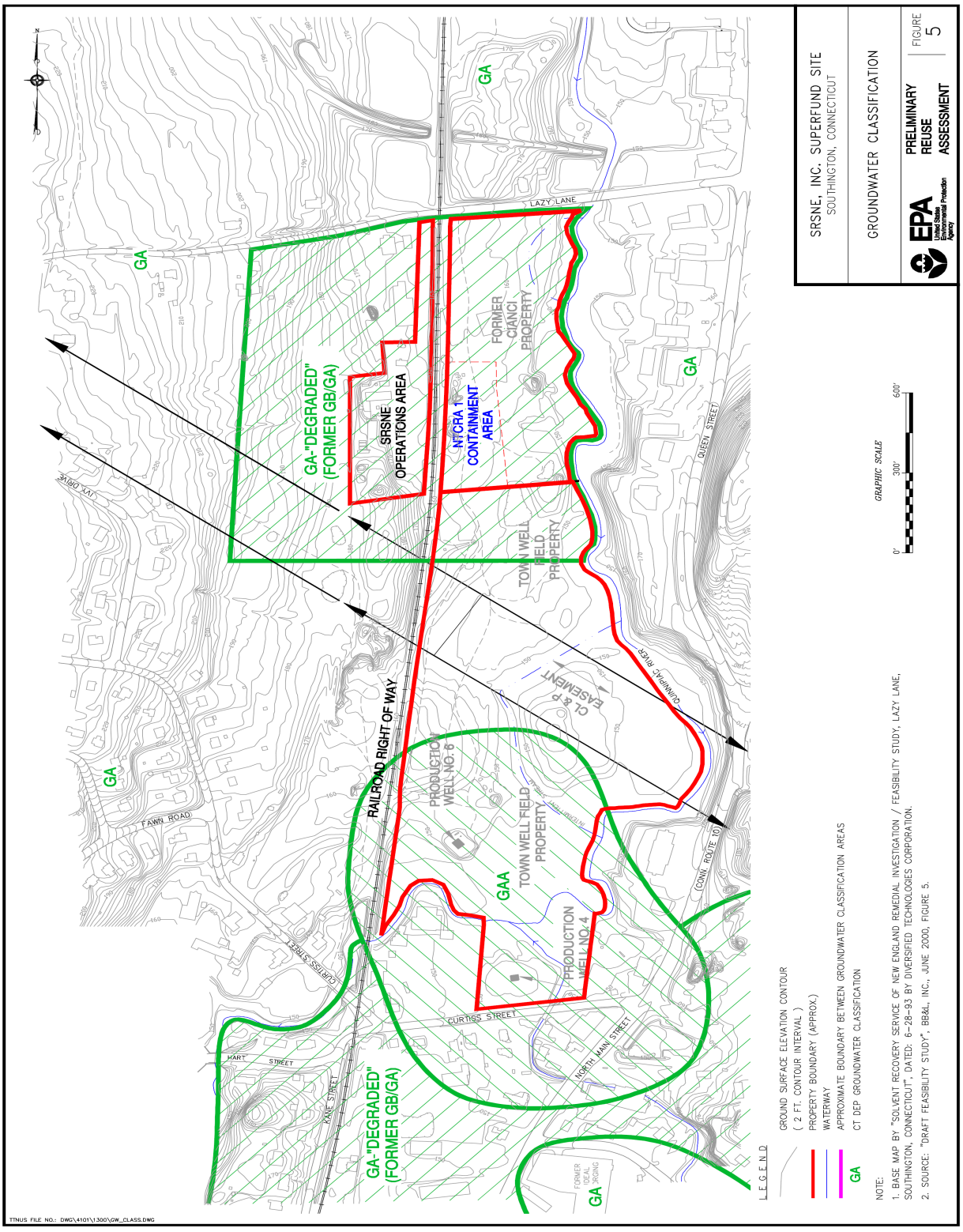
The northern portion of the Town Well Field is classified as GA. Although there are VOCs present in the groundwater in this area of the aquifer, the State's goal is to maintain the GA quality or restore it to natural quality.

The remaining portion encompassing the Town Production Wells 4 and 6 is designated as GAA. GAA indicates "Ground water used or which may be used for public supplies of water suitable for drinking without treatment; ground water in the area that contributes to a public drinking water supply well; and ground water in areas that have been designated as a future water supply in an individual water utility supply plan." While VOCs are present in this portion of the aquifer, the GAA designation has been given by the State although it does not currently meet the GAA classification (BB&L, 1998).

Production Well 4 operated from 1965 through 1977 and produced an average of 385 gallons per minute (gpm). Well No. 6 operated intermittently from 1978 until 1979 and produced an average yield of 100 gpm. Use of these public supply wells was discontinued in 1979 when VOC contamination was detected in water produced by both wells. (BB&L, 1998).

Groundwater underlying the Operations Area, the railroad ROW, the former Cianci Property, and the Town Well Field is currently not used for drinking water. However, several residences situated up slope of the Operations Area along Lazy Lane have domestic supply wells that are hydraulically upgradient of the Site. The property closest to the Operations Area (McCabe's Moving, residence, and Mickey's Garage), the Southington Police Department building located across Lazy Lane, the treatment plant on the former Cianci Property, and residences situated to the southwest of the Site are on public water.

Quinnipiac River - The river is currently designated as Class C/B, which indicates a current status as a Class C surface water quality with a goal of attaining Class B. Class B is designated as: "These surface waters are designated for: habitat for fish and other aquatic life and wildlife; recreation; navigation; and industrial and agricultural water supply." However, because of "point or non-point sources of pollution, certain criteria or one or more designated uses assigned to Class B waters may not currently be met. The water quality goal is achievement of Class B Criteria and attainment of Class B designated uses." In the vicinity of the former Cianci Property, the river channel is relatively narrow and shallow, and somewhat difficult to access because of overgrown vegetation. Further downstream, the river is used for recreational activities such as boating, swimming, and fishing. (HNUS, 1994)


SRSNE, INC. SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
GROUNDWATER CLASSIFICATION
EPA
PRELIMINARY REUSE ASSESSMENT
FIGURE 5
GRAPHIC SCALE
0'
300'
600'
GA-"DEGRADED" (FORMER GB/GA)
SRSNE OPERATIONS AREA
NTCRA CONTAINMENT AREA
FORMER CIANCI PROPERTY
TOWN WELL FIELD PROPERTY
PRODUCTION WELL NO. 6
PRODUCTION WELL NO. 4
RAILROAD RIGHT OF WAY
C.L.&P. EASEMENT
LAZY LANE
QUEEN STREET
FAWN ROAD
CURTISS STREET
HART STREET
KANE STREET
NORTH MAIN STREET
QUINNIPIAC RIVER
(CONN. ROUTE 10)
FORMER IDEAL PAINT
GA
GAA
LEGEND
GROUND SURFACE ELEVATION CONTOUR
(2 FT. CONTOUR INTERVAL)
PROPERTY BOUNDARY (APPROX.)
WATERWAY
APPROXIMATE BOUNDARY BETWEEN GROUNDWATER CLASSIFICATION AREAS
CT DEP GROUNDWATER CLASSIFICATION
NOTE:
1. BASE MAP BY "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION / FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONNECTICUT", DATED: 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. SOURCE: "DRAFT FEASIBILITY STUDY", BB&L, INC., JUNE 2000, FIGURE 5.
TTNUS FILE NO.: DWG\4101\1300\GW_CLASS.DWG

1.1.1 Neighboring Activities and Land Uses

Southington is located approximately 15 miles southwest of Hartford, the state capital. It is 35 square miles and is bordered to the north by Plainville, to the east by Berlin and Meriden, to the south by Cheshire, and to the west by Wolcott. The population of Southington is 39,728 residents (based on the 2000 US Census) with a population density of 1,104 people per square mile.

The Town of Southington was incorporated in 1779. This area was originally known as Panthorne and was settled by a Farmington resident. The area became known as South Farmington, which was gradually shortened to its current form, Southington. By the second half of the 1700s, Southington's industries included grist and saw mills, a brass foundry, and potash works. (Source: http://courant.ctnow.com/town/index.cfm?name=southington) Subsequent industrial operations included a cement mill, and the manufacture of such items as nuts and bolts, tools, and automotive parts and batteries. (Source: www.rootsweb.com/~ctcsouth/history.html)

Currently, Southington is a community with a mix of residential, commercial and industrial properties. The majority of the population is of working age and the work force consists of skilled and educated workers. Transportation to Hartford and other major metropolitan areas is provided through two major highways. Interstate 84 connects Southington to the rest of Connecticut, Massachusetts, and New York. Route 691 links Southington to Interstate 91, which provides easy access to Northern New England or to Interstate 95, which runs the length of the East Coast. Deep water ports are nearby along the Connecticut coast. Bradley International Airport, located just north of Hartford, provides access to air transportation. The municipal government consists of a town manager and a town council. (Source: http://www.cityofprogress.com/ingredients.htm)

Within the immediate vicinity of the SRSNE site, the land use is mixed. The parcel situated immediately north of the Operations Area is occupied by a single-story building that houses office space for McCabe's Moving Company, a storage warehouse, and a bedding outlet. Immediately north of the McCabe building is a single-story residence and a former auto body repair business (Mickey's Garage). The parcel and the three buildings are owned by Mickey Maiellaro who lives in the residence. Access to Lazy Lane from the Operations Area is along this parcel. Immediately due north of the former Cianci property, across Lazy Lane, is the newly-constructed Southington Police Department building (69 Lazy Lane), which is a single-story, brick-faced structure. To the northwest of the site, there are several undeveloped parcels owned by the Carpenter Realty Company. Plans have been submitted by Carpenter Realty to the Town Planning and Zoning Commission for the construction of an industrial subdivision with six buildings and parking lots.

New Southington Police Department facility on Lazy Lane.

Storage warehouse and residence immediately north of Operations Area.

Private properties with single-family residences comprise most of the area west (and upland) of the Operations Area parcel. Abutting the western perimeter of the Operations Area is the Yorski property, which includes a residence and cultivated vegetable plots. To the south of the Operations Area is the Delahunty parcel, which is undeveloped. A Connecticut Light and Power (CL&P) easement is present south of the Operations Area parcel and is located in the Delahunty and the Town Well parcels in an northwest-southwest orientation. High-tension electrical transmission lines and towers are present in the CL&P easement.

In the vicinity of the SRSNE site, most of the commercial/light industrial areas are located along Route 10 (Queen Street), which runs east of and parallel to the Quinnipiac River.

1.1.2 Site Zoning

Land Use Zoning - The four parcels associated with SRSNE are currently zoned as Industrial Zone I-2. The permitted uses of an I-2 parcel are detailed in the Town of Southington Zoning Regulations (amended February 12, 2003), Section 5-02.

Permitted I-2 uses include: building materials, sales and storage yards and building; storage of construction materials, including pipe; storage and repair of construction equipment; storage of well drilling equipment; trucking terminals, and other uses permitted by the Town Zoning and Planning Commission. The following uses are permissible (although they may result in noise, glare, air pollution, fire hazards, or safety hazards), if a special permit is granted by the Commission, including: plants generating power, disposing of sewage and/or garbage; production, processing, and storage of coal, coal tar, petroleum, and asphalt products; processing of earth materials including batch plants; and industrial processes that use hammer mills, ball mills, rolling mills, or drop forges.

In addition, I-2 parcels uses include those allowed for I-1 zoned parcels, which include: farm and construction sales and services; greenhouses and nurseries; research laboratories; warehouses for finished goods; health clubs and gymnasiums; scientific research and manufacture of bio-medical products; communications industry; manufacturing and/or assembly of electronic, computer, or robotic good; conference center; professional offices; executive parks; dinner theaters; and the reuse of existing industrial buildings that were in existence prior to 1957 or are obsolete.

One I-1 zoning requirement (Section 5-01.1, A), prohibits the production of objectionable noise, glare, air pollution, fire hazard, or safety hazard. Therefore, these requirements are also applicable to I-2 zoned parcels, unless a special permit is granted by the Zoning and Planning Commission.

Any planned future land use will need to comply with the requirements established in the Town of Southington Zoning Regulations (amended February 12, 2003).

Enterprise Zone - The State of Connecticut Department of Economic and Community Development has an Enterprise Zone Program to promote the establishment of businesses within communities, thereby fostering job growth and economic development. In Southington, all four parcels of interest are located within the Town's designated Enterprise Zone. Incentives to businesses include temporary abatements of local property taxes and credits to Connecticut state business taxes.

As presented in the State's Economic Development Web site:

"*An Enterprise Zone is a designated area in a Targeted Investment Community. Incentive benefits are provided for eligible business relocation/expansion projects within the zone. Eligible businesses include manufacturers, warehouse distributors (new construction/expansion only), and certain designated service related businesses. Benefits include:*

- *A 5-year, 80% abatement of local property taxes on all qualifying real and personal property that are new (note: existing real property that meets certification requirements is defined as new for the purpose of this program) to the Grand List of the City/Town as a direct result of a business relocation, expansion or renovation project;*
- *10-year, 25% or 50% credit on that portion of the Connecticut Corporate Business Tax that is directly attributable to this business relocation, expansion or renovation project as determined by the Connecticut Department of Revenue Services and as provided under section 12-217(e) of the Connecticut General Statutes.*

In order to qualify for the 50% credit, at least 30% of the new employees must be residents of the Enterprise Zone or residents of the Municipality in which the plant is located and eligible under the Federal Job Training partnership Act (JTPA). The local Connecticut Department of Labor Job Service Office is the contact concerning the availability of JTPA eligible applicants.

Also, within an Enterprise Zone, residential and commercial property owners are eligible, by ordinance, for the fixing of assessments on all real property in such zone for improvements made to their properties which are improved during the period when such area is designated as an Enterprise Zone. The fixed assessment will be for a period of seven years from the time of such improvement and municipality shall defer any increase. Deferral on increased assessment due to improvements is as follows: 100% deferred in years 1 & 2, 50% in year 3, then declining 10% per year through year 7. These benefits are provided at the local level."

1.2 Environmental History/Status

This section summarizes SRSNE's history, the federal and state response actions, on-going Superfund enforcement actions, and identifies the remaining threats and contamination associated with the site.

1.2.1 Past Facility Operations

SRSNE began operating in Southington around 1955. Spent solvents were received from customers, distilled to remove impurities, and the recovered solvents were returned to the customer for reuse. From 1957 through approximately 1967, the non-recoverable fractions (consisting of distillation or still bottom sludges) were disposed of in two unlined lagoons (also called sludge pits). Spent solvents that were processed by SRSNE included chlorinated solvents, ketones, alcohols, and aromatic compounds. SRSNE estimated that between 1,000 to 2,000 gallons of still bottoms per week may have been discharged during that ten year period. Accumulated sludges were periodically removed. Use of the lagoons for sludge disposal was discontinued in 1967 when they were emptied of visible residues of paint and lacquer and filled with dirt. Neither the quantity of sludge disposed in the lagoons nor the amount removed could be determined.

After the lagoons were closed, wastes were burned in an open pit incinerator or disposed off site at several locations within the Town of Southington and the Southington Landfill. Approximately 1000 pounds of solvent sludge were burned per day in the incinerator. Incinerator ash was used as fill within the Operations Area. In 1976, the State of Connecticut ordered the practice of burning discontinued.

After 1976, SRSNE incorporated some of the spent solvents into their "fuel program". Solvents were filtered and blended with fuel and sold as a waste fuel product used in cement kilns. By the early 1980s, as much as half of the spent solvents were blended with fuel. Still bottoms from distillation of the other half were also blended with fuel. By 1988, distillation had phased out entirely, and fuel blending became the primary enterprise of the facility.

Past operating practices contributed to contamination on the SRSNE Operations Area and surrounding properties. The improper handling and storage of drums, the loading and unloading of tank trucks, the transfer of spent solvents into storage tanks, and the storage of solvents and fuel in tank farms resulted in numerous leaks and spills to bare ground, and into the underlying aquifer. Between 1955 and 1991, an estimated 41 million gallons of waste solvents, fuels, paints, and similar liquids were handled or processed by SRSNE.

In 1976, VOCs were detected in Southington's Production Wells 4 and 6, which were subsequently closed in 1979 due to chlorinated solvent contamination. Environmental officials contended that SRSNE caused the contamination in Well No. 6 and contributed to the pollution in Well No. 4. From 1979 until 1991, SRSNE continued to operate while regulatory actions were taken by EPA and CT DEP.

1.2.2 Federal and State Response Actions

In 1979, EPA filed suit against SRSNE under the Resource Conservation and Recovery Act (RCRA) for contaminating Production Wells 4 and 6, and under the Clean Water Act for the unpermitted discharge of pollutants into the Quinnipiac River. The Southington Board of Water Commissioners and the Connecticut Fund for the Environment later joined EPA in that action. The 1979 suit was amended in 1982 to include claims under the 1980 Superfund law. Before the case came to trial, an agreement, resulting in a Consent Decree, was reached in 1983. The Consent Decree required SRSNE to make improvements to its solvents handling procedures, to install an on-site groundwater recovery and treatment system, and to construct an off-site interception system to prevent contaminated groundwater from moving beyond the facility boundaries. Because of the threat to human health and the environment, EPA placed the SRSNE site on the National Priorities List in September 1983, making it eligible for federal assistance for study and cleanup.

Between 1983 and its closing in 1991, SRSNE made some of the improvements required under the Consent Decree. They installed 25 interceptor wells in 1985 to capture contaminated groundwater, which was treated by air stripping VOCs that were subsequently discharged to the ambient air. Treated groundwater was discharged to the Quinnipiac River. SRSNE also installed an off-site groundwater interceptor system, paved the working areas with asphalt, installed berms to contain spills, improved fire protection and suppression measures by having a public water line extended to the facility, and improved some general housekeeping measures. Despite these efforts, numerous deficiencies remained.

From 1983 through 1988, the federal and state governments attempted to compel SRSNE to clean up its facility and operations in accordance with the requirements of the 1983 Consent Decree. A Hazardous and

Solid Waste (HSWA) permit was issued to SRSNE, which required the submittal of a plan to clean up the contaminated soils at and around the facility. Despite several submissions of such a plan, none were approved by EPA because of deficiencies. The CT DEP issued a RCRA permit to SRSNE in 1986 with provisions requiring major improvements in the facility's waste handling facilities, establishing emergency release procedures, and establishing financial responsibility requirements. SRSNE failed to come into compliance with existing agreements.

In the spring of 1988, EPA and the CT DEP gave SRSNE officials a schedule for short-term operations and safety improvements as well as long-term activities that would be incorporated into the 1983 Consent Decree. Negotiations were terminated in August 1988 due to inadequate progress by SRSNE in implementing short-term improvements, and EPA obligated Superfund monies to be able to conduct its own work on the site. A Remedial Investigation (RI)/Feasibility Study (FS) was initiated in 1990.

Early in 1991, the State of Connecticut sought a temporary injunction against SRSNE for its failure to meet the terms of the existing RCRA permit. When the temporary injunction was granted, SRSNE was given deadlines to meet specific legal requirements or face permanent closure. One of these requirements was that SRSNE obtain adequate liability insurance for sudden accidental occurrences by May 28, 1991. On May 29, 1991, the Attorney General for the State of Connecticut confirmed that SRSNE had not been able to obtain this insurance, and closed the facility permanently.

During the spring of 1992, EPA performed an assessment of potential hazards at the Operations Area and its environs. Analysis of surface and near-surface soils indicated that the unlined drainage ditch on the eastern perimeter of the Operations Area contained sediments contaminated with polychlorinated biphenyls (PCBs) and a variety of VOCs. A time-critical removal action was conducted during August and September of 1992 to mitigate potential health threats associated with the PCB contamination. The sediments were excavated, a french drain was installed, the drainage ditch was backfilled and covered, and a chain-link fence was installed along western and southern sections of the former Cianci Property perimeter to discourage entry. Concurrently, because of unacceptable air emissions from the cooling tower/air stripper groundwater treatment system, the CT DEP installed an ultra-violet (UV)/oxidation treatment unit in July 1992 that operated until 1994. A second time-critical removal action was performed by EPA in January 1994 to remove and dispose of laboratory chemicals and asbestos that SRSNE had left on the site.

1.2.3 Superfund Enforcement Actions

From 1990 to 1992, EPA was involved in litigation with SRSNE, Inc. A settlement was reached in August 1992, which required the owner, Carlton Boll, to pay a portion of the costs associated with the response actions at the site. As part of the shutdown of the SRSNE facility in 1991, tanks were emptied and cleaned, concrete containment areas were steam cleaned and pressure washed, and accumulated bulk liquid wastes were sent for off site disposal. EPA identified approximately 2340 Potentially Responsible Parties (PRP) that generated, brokered, or transported wastes sent to SRSNE. An early *de minimis* settlement was reached with approximately 840 small-volume contributors, which was finalized in a Consent Decree in September 1994. The remaining PRPs formed the SRSNE PRP Group to address future actions at the site.

EPA issued an Action Memorandum on April 1, 1993, to implement the first non-time-critical removal action (NTCRA 1), which consisted of the design and installation of a groundwater containment and treatment

system to prevent the migration of contaminated overburden groundwater beyond the former Cianci Property. EPA reached an agreement with the PRP Group to implement NTCRA 1. During 1994 and 1995, a sheet pile wall, an extraction well system, and a groundwater treatment facility were installed on the former Cianci Property. The extraction wells and treatment system were brought on line in July 1995. In June 1996, the PRP Group constructed a half-acre wetland on the western bank of the Quinnipiac River in the former Cianci Property as part of a mitigation plan. Figure 6 depicts the various response actions undertaken by the PRP Group.

View of NTCRA 1 treatment building looking north across former Cianci property. New Southington police station is in right background.

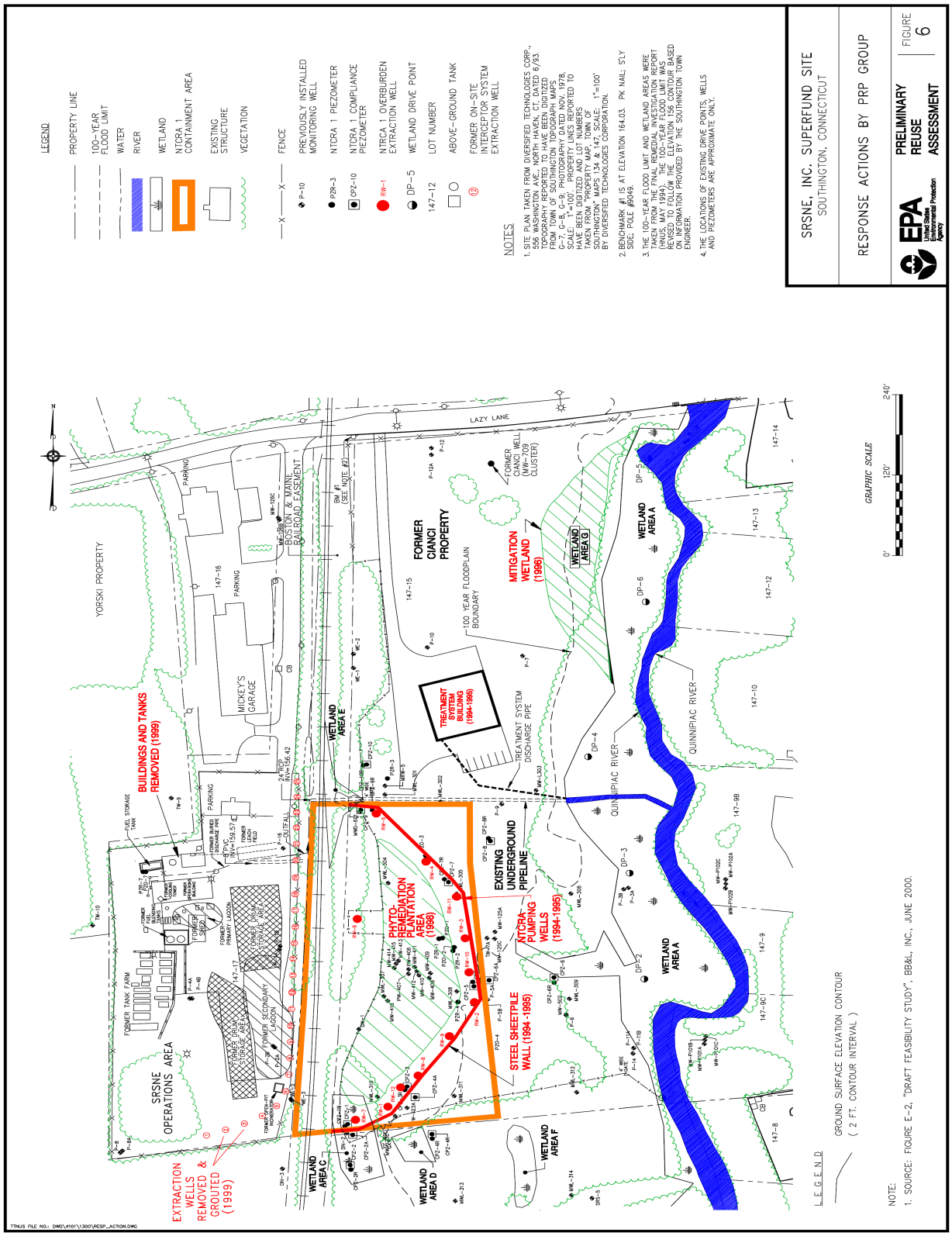
In 1995, EPA issued a second Action Memorandum (NTCRA 2), which required the implementation of a groundwater containment system to minimize the migration of contaminated groundwater in the bedrock aquifer unit, and to perform repairs and repave the Operations Area. An Administrative Order of Consent was signed by EPA and the PRP Group on February 6, 1996. The PRP Group completed groundwater flow modeling of the bedrock aquifer, installed and tested a bedrock test well in the Town Well Field, and connected the extraction well to the NTCRA 1 treatment system in July 1999.

Phytoremediation trees and monitoring wells

In summer 1998, a full-scale phytoremediation pilot study was initiated by the PRP Group within the NTCRA 1 area of containment. Approximately 1,000 poplar trees were planted to evaluate whether the water uptake could reduce the groundwater being extracted for above-ground treatment. The groundwater VOCs were expected to be degraded in the trees' root mass due to naturally occurring enzymes. In 1999, the pilot study replaced some of the poplar trees with willow trees to establish a mixed species growth. This pilot study is on going.

In 1999, the PRP Group addressed the remaining abandoned structures within the Operations Area. All above-ground structures (including storage tanks, modular office, UV/oxidation treatment building, process equipment and piping, debris, and miscellaneous materials) were decontaminated, demolished, and sent for off-site disposal.

The 1996 Administrative Order of Consent also required the PRP Group to complete the RI/FS. Additional field investigations and treatability studies were conducted by the PRP Group and a *Remedial Investigation Report* was completed in June 1998. The FS is currently under development.


LEGEND
PROPERTY LINE
100-YEAR FLOOD LIMIT
WATER
RIVER
WETLAND
NTCRA 1 CONTAINMENT AREA
EXISTING STRUCTURE
VEGETATION
FENCE
P-10 PREVIOUSLY INSTALLED MONITORING WELL
PZR-3 NTCRA 1 PIEZOMETER
CPZ-10 NTCRA 1 COMPLIANCE PIEZOMETER
RW-1 NTCRA 1 OVERBURDEN EXTRACTION WELL
DP-5 WETLAND DRIVE POINT
147-12 LOT NUMBER
ABOVE-GROUND TANK
(2) FORMER ON-SITE INTERCEPTOR SYSTEM EXTRACTION WELL
NOTES
1. SITE PLAN TAKEN FROM DIVERSIFIED TECHNOLOGIES CORP., 566 WASHINGTON AVE., NORTH HAVEN, CT, DATED 6/93. TOPOGRAPHY REPORTED TO HAVE BEEN DIGITIZED FROM TOWN OF SOUTHINGTON, CONNECTICUT AND MASS. GIS, 2-FT. C.I., PHOTOGRAPHY DATED NOV. 1978, SCALE: 1"=100'. PROPERTY LINES REPORTED TO HAVE BEEN DIGITIZED AND LOT NUMBERS TAKEN FROM "PROPERTY MAP, TOWN OF SOUTHINGTON, CONNECTICUT, SCALE: 1"=100' BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. BENCHMARK #1 IS AT ELEVATION 164.03. PK NAIL; S'LY SIDE; POLE #8049.
3. THE 100-YEAR FLOOD LIMIT AND WETLAND AREAS WERE TAKEN FROM THE FINAL REMEDIAL INVESTIGATION REPORT (HNUS, MAY 1994). THE 100-YEAR FLOOD LIMIT WAS REVISED TO REFLECT THE ELEVATION INCREASE BASED ON INFORMATION PROVIDED BY THE SOUTHINGTON TOWN ENGINEER.
4. THE LOCATIONS OF EXISTING DRIVE POINTS, WELLS AND PIEZOMETERS ARE APPROXIMATE ONLY.
SRSNE, INC. SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
RESPONSE ACTIONS BY PRP GROUP
EPA United States Environmental Protection Agency
PRELIMINARY REUSE ASSESSMENT
FIGURE 6
BUILDINGS AND TANKS REMOVED (1999)
EXTRACTION WELLS REMOVED & GROUTED (1999)
PHYTO-REMEDIATION AREA (1998)
STEEL SHEETPILE WALL (1994-1995)
NTCRA PUMPING WELLS (1994-1995)
EXISTING UNDERGROUND PIPELINE
TREATMENT SYSTEM BUILDING (1994-1996)
MITIGATION WETLAND (1996)
FORMER CIANCI PROPERTY
YORSKI PROPERTY
SRSNE OPERATIONS AREA
LAZY LANE
BOSTON & MAINE RAILROAD EASEMENT
100 YEAR FLOODPLAIN BOUNDARY
QUINNIPIAC RIVER
WETLAND AREA A
WETLAND AREA C
WETLAND AREA D
WETLAND AREA E
WETLAND AREA F
WETLAND AREA G
GRAPHIC SCALE
0' 120' 240'
L E G E N D
GROUND SURFACE ELEVATION CONTOUR
(2 FT. CONTOUR INTERVAL)
NOTE:
1. SOURCE: FIGURE E-2, "DRAFT FEASIBILITY STUDY", BB&L, INC., JUNE 2000.
TTNUS FILE NO.: DWG\4101\3300\RESP_ACTION.DWG

1.2.4 Site Contaminants and Threats

Site contamination for each of the four parcels of interest and the aquifer is summarized below.

a. Soils

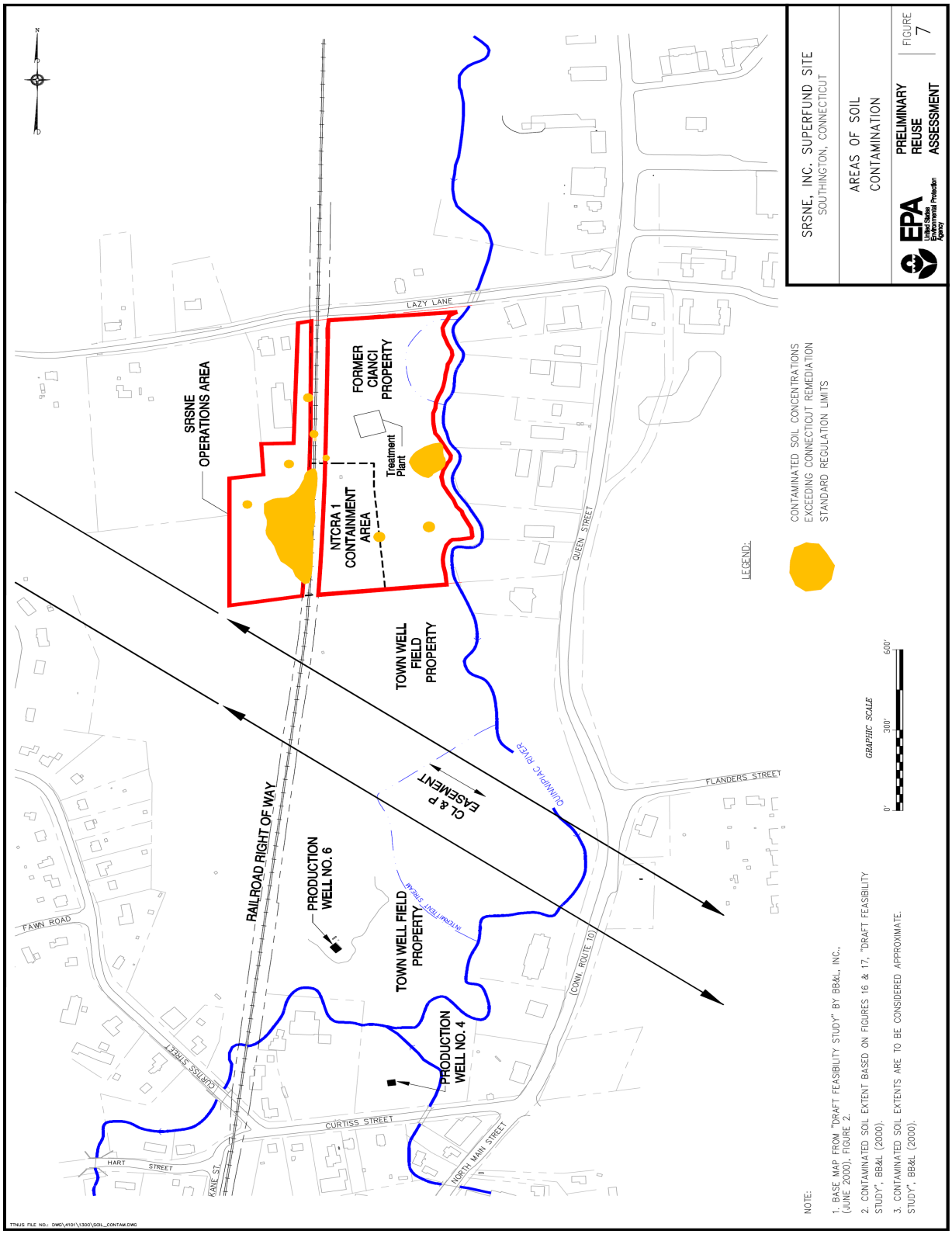
Results of two RI reports for soil contamination are summarized as follows and shown on Figure 7:

Operations Area - As the result of spills and discharges and poor housekeeping at the SRSNE facility, the surficial and subsurface soils in the Operations Area have been contaminated by a variety of chemicals including: chlorinated solvents, petroleum hydrocarbons, alcohols, ketones, PCBs, dioxins and furans. The contaminants are present in both the saturated and unsaturated soil underlying the Operations Area in locations where past process activities occurred such as spent solvent transfers, drum handling, storage, blending, distillation, and discharges to lagoons. Elevated dioxin, furans, and metal concentrations were detected in soil where the open pit incinerator was located. Non-aqueous phase liquid (NAPL) has been identified in several monitoring wells in the Operations Area, primarily in locations associated with the lagoons (HNUS, 1994). Contaminant concentrations in soil exceed the Connecticut Remediation Standard Regulations (RSRs) for potential human exposures (Direct Exposure Criteria) and for potential leaching of contaminants into groundwater (Pollutant Mobility Criteria). Based on the results of the human-health risk assessments prepared for the SRSNE site, potential carcinogenic and non-carcinogenic risks exceed both federal and state allowable risk ranges.

Railroad ROW - The subsurface soil in the ROW is expected to be similarly contaminated as the Operations Area subsurface soil because of the proximity of the railroad bed to the former lagoons (which abutted the eastern fence of the Operations Area). Also, a drainage ditch was located outside of the eastern perimeter of the Operations Area, parallel to the ROW. This ditch was used to convey overflow and runoff from the Operations Area to a drainage ditch that crossed under the railroad ROW. Liquid contaminants from the drainage ditch likely seeped into the subsurface of the railroad bed materials. The drainage ditch and contaminated sediments were excavated and removed by EPA in 1992; the railroad bed was not excavated.

There is no information regarding whether the soil in the railroad ROW, other than the portion affected by the Operations Area, is contaminated. Historically, railroad engines used transformers that were filled with PCBs in dielectric liquids. Leaks from the transformers could have resulted in some deposition of PCBs in the soil, along with hydraulic fluid, and other lubricating oils. The railroad ties were typically treated with creosote. There is no information regarding the potential soil contamination (or absence) in the railroad bed materials.

Former Cianci Property - Soil contaminated with VOCs has been detected in the subsurface, primarily the result of groundwater and NAPL contamination. Most of the contaminated soil was detected in the southern half of the former Cianci Property which is directly east of the Operations Area. The VOC concentrations detected exceed the Connecticut RSRs for Pollutant Mobility Criteria. Based on risk assessment results, the metals detected in the surficial soil do not pose unacceptable risks. Some PAHs were detected in surficial soil, their presence likely attributed to asphaltic debris materials left on the property. A 30-inch buried culvert (east-west) is situated in the middle of the former Cianci Property, the area influent to the culvert, and the culvert outfall contain sediments with VOCs and PCBs.


SRSNE, INC. SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
AREAS OF SOIL CONTAMINATION
EPA United States Environmental Protection Agency
PRELIMINARY REUSE ASSESSMENT
FIGURE 7
SRSNE OPERATIONS AREA
FORMER CIANCI PROPERTY
Treatment Plant
NTCRA 1 CONTAINMENT AREA
TOWN WELL FIELD PROPERTY
TOWN WELL FIELD PROPERTY
PRODUCTION WELL NO. 6
PRODUCTION WELL NO. 4
RAILROAD RIGHT OF WAY
CL & P EASEMENT
INTERMITTENT STREAM
QUINNIPIAC RIVER
LAZY LANE
QUEEN STREET
FLANDERS STREET
CONN. ROUTE 10
FAWN ROAD
CURTISS STREET
HART STREET
KANE ST.
NORTH MAIN STREET
LEGEND:
CONTAMINATED SOIL CONCENTRATIONS EXCEEDING CONNECTICUT REMEDIATION STANDARD REGULATION LIMITS
GRAPHIC SCALE
0'
300'
600'
NOTE:
1. BASE MAP FROM "DRAFT FEASIBILITY STUDY" BY BB&L, INC., (JUNE 2000), FIGURE 2.
2. CONTAMINATED SOIL EXTENT BASED ON FIGURES 16 & 17, "DRAFT FEASIBILITY STUDY", BB&L (2000).
3. CONTAMINATED SOIL EXTENTS ARE TO BE CONSIDERED APPROXIMATE.
TTN/US FILE NO.: DWG\4101\1300\SOIL_CONTAM.DWG

Town Well Field Property - The soil in the well field is generally free of VOCs. Only a sample obtained from a boring closest to the Operations Area contained some chlorinated solvents and aromatic hydrocarbons. Metals detected in the Well Field soil were comparable to background soil concentrations and do not pose unacceptable human-health risks, nor do they exceed the Connecticut RSRs.

b. Groundwater

Data from the SRSNE PRP Group's RI and draft FS reports are summarized as follows:

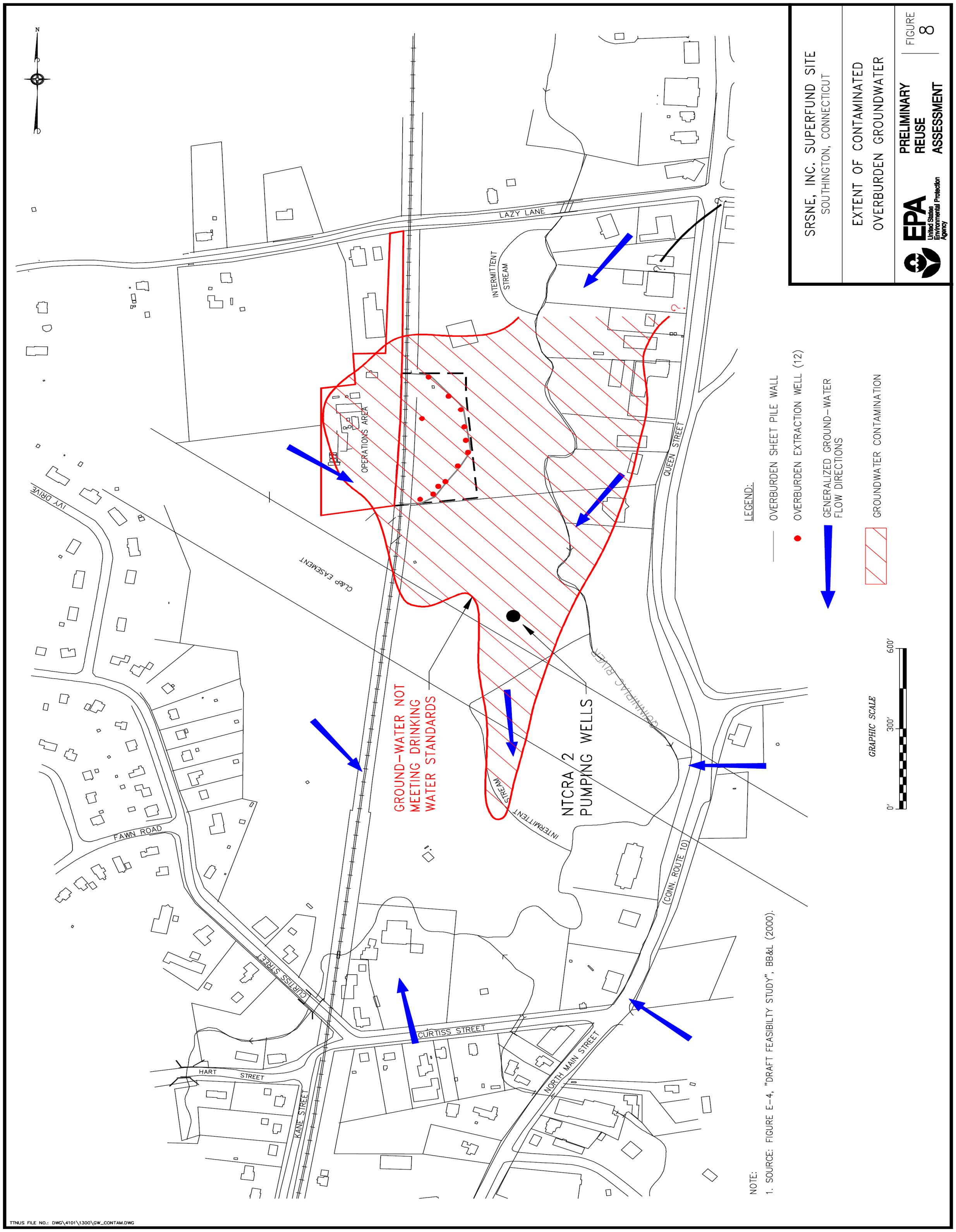
Overburden Groundwater - Groundwater contaminated by VOCs is present in the shallow, middle, and deep portions of the overburden aquifer unit. The VOCs, comprised of chlorinated solvents, ketones, aromatics, and alcohols, are present in concentrations that exceed the Connecticut Groundwater Protection Criteria and federal Maximum Contaminant Levels (MCLs). Contaminated overburden groundwater originates in the Operations Area and extends into the former Cianci Property and Town Well Field. Figure 8 depicts the extent of the VOC plume in the overburden aquifer.

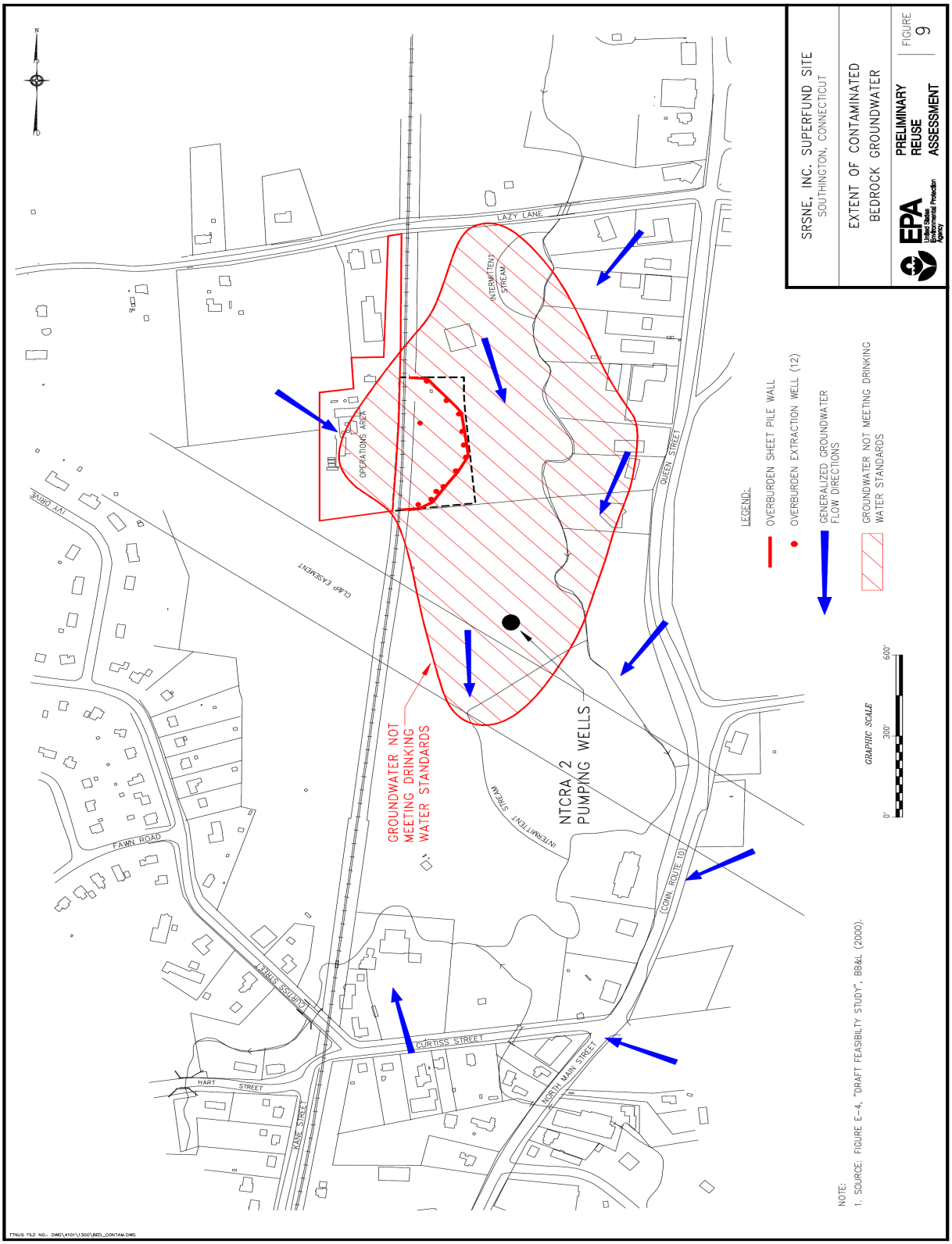
Bedrock Groundwater - Contaminated groundwater occurs in both the shallow and deep portions of the bedrock aquifer unit. The VOCs are similar to the those detected in the overburden aquifer unit, and their concentrations also exceed the Connecticut Groundwater Protection Criteria and federal MCLs. Contaminated bedrock groundwater originates in the Operations Area and extends into the former Cianci Property and Town Well Field. Figures 9 depicts the extent of the VOC plume in the bedrock aquifer.

NAPL - NAPL has been detected in several monitoring wells in the Operations Area and former Cianci Property. The NAPL consists of separate-phase chemicals that are continuing sources of groundwater contamination. NAPLs are the undissolved chlorinated solvents that were released at the Operations Area which, over time, have migrated throughout the overburden and bedrock aquifers.

1.3 Cleanup Status

The PRP Group submitted a draft feasibility study (FS) in 1998. EPA required the PRP group to modify the FS to include the evaluation of technologies to address the NAPL present in the subsurface of the Operations Area and the former Cianci Property. When the 1998 draft FS was prepared, the treatment technologies available to treat NAPL were not sufficiently advanced or insufficient information was available to assess the implementability or effectiveness of these methods. Since then, progress and advancements have been made with in-situ remediation technologies, and EPA asked the PRP Group to revise the FS. EPA and CT DEP are currently working with the PRP Group to further refine the scope of future investigations of NAPL extent at the site, remedial technologies, and remedial action objectives. The goal is to have completed the FS by June 2004, with a Record of the Decision by December 2004. Contaminated groundwater in the overburden and bedrock aquifers continues to be collected and treated.


SRSNE, INC. SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
EXTENT OF CONTAMINATED OVERBURDEN GROUNDWATER
FIGURE 8
PRELIMINARY REUSE ASSESSMENT
EPA United States Environmental Protection Agency
LEGEND:
OVERBURDEN SHEET PILE WALL
OVERBURDEN EXTRACTION WELL (12)
GENERALIZED GROUND-WATER FLOW DIRECTIONS
GROUNDWATER CONTAMINATION
GRAPHIC SCALE
0'
300'
600'
GROUND-WATER NOT MEETING DRINKING WATER STANDARDS
NTCRA 2 PUMPING WELLS
OPERATIONS AREA
INTERMITTENT STREAM
CL&P EASEMENT
QUINNIPIAC RIVER
LAZY LANE
QUEEN STREET
(CONN. ROUTE 10)
CURTISS STREET
NORTH MAIN STREET
HART STREET
KANE STREET
FAWN ROAD
IVY DRIVE
NOTE:
1. SOURCE: FIGURE E-4, "DRAFT FEASIBILITY STUDY", BB&L (2000).


SRSNE, INC. SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
EXTENT OF CONTAMINATED BEDROCK GROUNDWATER
EPA United States Environmental Protection Agency
PRELIMINARY REUSE ASSESSMENT
FIGURE 9
LEGEND:
OVERBURDEN SHEET PILE WALL
OVERBURDEN EXTRACTION WELL (12)
GENERALIZED GROUNDWATER FLOW DIRECTIONS
GROUNDWATER NOT MEETING DRINKING WATER STANDARDS
GRAPHIC SCALE
0'
300'
600'
NOTE:
1. SOURCE: FIGURE E-4, "DRAFT FEASIBILITY STUDY", BB&L (2000).
LAZY LANE
INTERMITTENT STREAM
OPERATIONS AREA
QUEEN STREET
IVY DRIVE
CLEAR EASEMENT
GROUNDWATER NOT MEETING DRINKING WATER STANDARDS
NTCRA/2 PUMPING WELLS
INTERMITTENT STREAM
FAWN ROAD
CONN. ROUTE 10
CURTISS STREET
HART STREET
JANE STREET
NORTH MAIN STREET

SECTION 2 - REUSE STATUS

Summary descriptions of each parcel of interest are provided in this section.

2.1 Operations Area Parcel

The Operations Area parcel is Lot Number 12 on the Tax Assessor Map No. 145, and consists of 3.7 acres. The address of this parcel is 114 Lazy Lane. The Tax Assessor records indicate that the parcel is currently owned by SRSNE, Inc. Discussions with a PRP Group representative (B. Thompson, *de maximis*) indicate that the property is part of the Estate of Carlton Boll, who was previously the owner of SRSNE. The PRP Group has received permission from the attorneys representing the Estate of Carlton Boll for access to complete all activities associated with the investigation and future cleanup of the site. According to B. Thompson, there are deed restrictions attached to this parcel, which prohibit the use of groundwater or use of the property for residential purposes.

The Operations Area is currently vacant. It is paved and enclosed by a 6-foot high fence. This parcel is bounded to the east by the railroad ROW and former Cianci Property. Access into the Operations Area is through a double gate (see photos). The property is currently paved with asphalt. The pavement has not been maintained, however, and cracks have developed. Vegetation has become established and has flourished in the pavement cracks (see photos).

Monitoring wells are located throughout the Operations Area. Utilities available to this parcel include town water, telephone, and electricity. A fire hydrant is located approximately 25 feet from the Operations Area entrance.

2.1.1 Background

This parcel was purchased by SRSNE for its spent fuel processing operations. Based on a review of aerial photographs compiled by EPIC, it appears that a substantial portion of the original western embankment was excavated and leveled to create the flat parking and storage areas. As described previously in Section 1.2.1, all process activities ceased in 1991.

The original structures within the Operations Area included a modular office, a process building, a tank farm, a drum storage area, a processing area, a tank car and trailer parking area, and two fuel blending tanks. These structures were decontaminated, demolished, and removed by the PRP Group in 1999.

2.1.2 Current Uses

The Operations Area is currently unused. However, the access road (which is part of this parcel) leading from the Operations Area to Lazy Lane is used by McCabe's Moving Company.

2.1.3 Potential Future Uses

Existing zoning for the parcel would allow the many uses that are detailed in the Town of Southington's Zoning Regulations, as described in section 1.1.2. Although all uses would first require some level of remediation and institutional controls, the specific examples listed in the regulations are useful in providing general concepts and illustrations of how the property might be redeveloped after remediation is complete.

The property has many characteristics that would facilitate development once remediation is complete including industrial zoning, Enterprise Zone designation, access to basic infrastructure (water, electricity, sewer) generally flat topography , and proximity to I-84. The location of the property alongside a potential greenway suggests a reuse centered on public access or recreation such as a walking track, tennis courts, or skateboard park. However, town officials have indicated they would be hesitant to approve a public reuse at a location where waste has been left in place, even if a containment system protects people and the environment from exposure.

2.1.4 Potential Use/Reuse Issues and Considerations

- The Operations Area parcel is currently classified as Industrial Zone I-2 and is also within the area designated as an Enterprise Zone by the Commissioner of Economic and Community Development. Any future reuse of the parcel will need to comply with local and state regulations governing land use in properties containing contaminated soils and groundwater, and aquifer protection regulations and requirements.

- Site contamination in soils and groundwater will require some form of remediation prior to the property being released for redevelopment.

- Existing monitoring wells may need to be modified or abandoned, depending on the future property reuse. Modifications or abandonment will need to comply with local and state regulations.

- No current sewer connection.

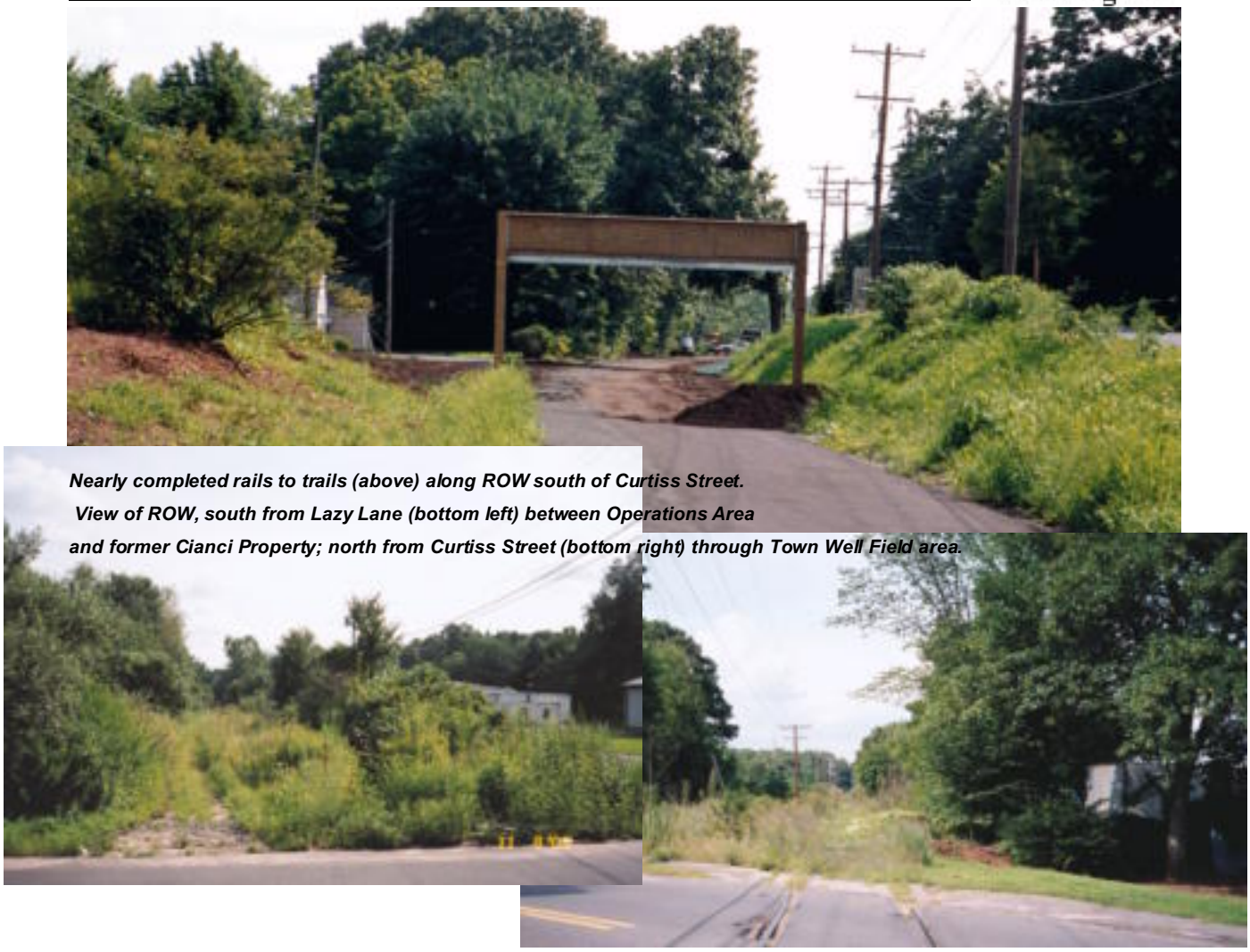
- PRP group has broad access agreement that would allow some reuse to occur as part of a selected remedy. Legal ownership, future liability, and O&M questions need to be determined for various reuse scenarios.

- Determine availability of abutting commercial property to the north to potentially expand the redevelopment footprint for the former operations area.

- Reuse plans have not been discussed with the Estate of Carlton Boll and EPA must still consult with the appropriate representative.

- Public perception that contaminated sites cannot be reused safely (which precluded the reuse of a portion of the Old Southington Landfill as a town park), and concerns about potential liability and costs associated with contaminated properties, discourages the town from seeking ownership to any portion of SRSNE.

- Neighboring residents would oppose any reuse that would utilize hazardous substances or result in air emissions.



Nearly completed rails to trails (above) along ROW south of Curtiss Street.
View of ROW, south from Lazy Lane (bottom left) between Operations Area and former Cianci Property; north from Curtiss Street (bottom right) through Town Well Field area.

2.2 Railroad Right-of-Way Parcel

The Railroad ROW parcel is Lot Number 21 on the Tax Assessor Map No. 133, annotated as Part-of-Parcel 133-63. The Tax Assessor records indicate that the parcel is currently owned by the CT DEP. The Assessor map lists indicates an area of 5.41 acres and 3.63 acres for the two parcels, although staff in the Southington Assessors' Office thought that the acreage listed may not be accurate. The portion of the railroad ROW extending from Lazy Lane to Curtiss Street is approximately 3,000 feet long. The portion of this parcel of interest to this Preliminary Reuse Assessment is the area immediately adjacent to the Operations Area. Chlorinated solvent contamination from the Operations Area has likely migrated into the railroad bed.

Access to the railroad ROW is unrestricted. The steel rails have been removed, but the ties remain. The vegetation is overgrown and there appears to be no maintenance.

2.2.1 Background

CT DEP has worked on over 100 miles of rails to trails projects in Connecticut. Rails to trails projects are multi-purpose public paths created from former railroad corridors. CT DEP works with the CT Department of Transportation, the CT Department of Public Health, and individual towns to promote, develop and maintain the trails known as greenways. The state's goal, along with other government and non-government agencies, is to extend the current trail along the rail corridor, known as the Farmington Canal Heritage Trail, from New Haven to the Massachusetts border. The federal government, through the Transportation Equity Act for the 21st Century has provided Connecticut with rails to trails project funding. Trails are maintained by the towns in which they are located. Southington received a $1.5 million grant to complete the rail section which runs from West Main Street in the Plantsville section of town, north through the downtown area, and ends at Hart and Curtiss streets in a residential area at the southern end of the Town Well Field. (CT General Assembly & CT DOT websites.)

While the paving for the rails to trails conversion has just been completed south of the well field property, the segment north of Lazy Lane is still in the planning stage. North of the site, the Boston & Maine Railroad ROW has not been completely abandoned. Freight trains still run on the former Canal Line from Plainville center to Southington and the line still has tracks from Plainville to south of Spring Street in Southington (Plainville Citizen,11/29/02).

2.2.2 Current Uses

The railroad ROW is currently unused along its 3000-foot length through the Town Well Field, and between the Operations Area and former Cianci Property.

2.2.3 Potential Future Uses

Town officials are extremely interested in the future reuse of this railroad ROW as a component of their existing rails to trails project. This is the only reuse scenario being discussed by the stakeholders which include the PRP group, neighboring residents, town officials, and the CT DEP which owns the rail corridor. The PRP group has informally committed to incorporate the construction of the rail trail into a protective remedy that allows for that use. The steel rails have already been removed from the 3000-foot ROW which is currently heavily vegetated.

2.2.4 Potential Use/Reuse Issues and Considerations

Since there is substantial agreement among all the stakeholders that conversion to a rail trail is the likely reuse scenario for the ROW, there is a level of certainty concerning the future use of this portion of the site. Such certainty narrows the range of issues to consider and resolve.

- Site contamination in soils and groundwater will require some form of remediation prior to the property being released for redevelopment.

- Ownership status and responsibility for trail maintenance would need to be established among the state, town, and PRP group.

- Local officials and residents would like the rails to trails conversion to be completed as soon as possible and would advocate an appropriate remedy design that provides flexibility in completing construction of the rail trail prior to overall site completion.

- This parcel is located in Southington's Industrial Zone I-2 and in Enterprise Zone. All future development will need to comply with aquifer protection regulations and requirements.

- Any activity is predicated on signing of Record of Decision which would determine how the portion of the railroad ROW adjacent to the Operations Area will be addressed in a future response action.

2.3 Former Cianci Property Parcel

The former Cianci property parcel is Lot Number 11 on the Tax Assessor Map No. 145, and consists of 10.3 acres. The address of this parcel is 90 Lazy Lane. The Tax Assessor records indicate that the parcel is currently owned by Lazy Lane Corporation. Discussions with the PRP Group's representative (B. Thompson, *de maximis*) indicates that the property is also part of the Estate of Carlton Boll. As with the Operations Area, the PRP Group has broad access to complete all activities associated with the investigation and future cleanup of the site. According to B. Thompson, there are deed restrictions attached to this parcel which prohibit the use of groundwater or use of the property for residential purposes.

2.3.1 Background

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This parcel was originally owned by the Cianci Construction Company and was used as an area to store and wash construction equipment using water drawn from a well located near the parcel's northern perimeter.

Partially-treated effluent from SRSNE's groundwater extraction system installed in 1985, drained into a ditch, through a culvert under the railroad bed and was discharged to the ground surface of the Cianci Property. In June 1988, SRSNE acquired this adjacent undeveloped lot from the Cianci Construction Company so that a 30-inch diameter conduit could be installed below grade to convey the partially-treated effluent to the Quinnipiac River.

2.3.2 Current Uses

This parcel is currently enclosed on three sides by a 6-foot high, chain link fence; the eastern perimeter abutting the Quinnipiac River is open, but heavily vegetated. Access into the property is through a sliding chain-link gate located near the northwestern corner of the parcel. At the southern perimeter of this parcel, a double swinging chain-link gate controls access from the Well Field parcel.

Under the Administrative Order of Consent for NTCRA 1, the SRSNE PRP Group installed several structures in the former Cianci Property during 1994 and 1995 to prevent the migration of contaminated groundwater away from the Operations Area.

There is an active groundwater extraction and treatment system situated within the 10.3 acre former Cianci Property parcel. The single-story treatment building, approximately 100' x 100', is located 300 feet back (south) from the parcel's frontage along Lazy Lane. The building's associated extraction and monitoring well network extends from the treatment building south to the back section of the property. A phytoremediation pilot study area, which consists of several hundred trees and has the appearance of a small tree farm, is co-located with the extraction well network along the southwest side of the property. A series of sheet pilings which form an "underground dam" or hydraulic barrier to prevent the migration of contamination are partially visible at the surface in the same area. The extraction and treatment system which will be operated for the foreseeable future occupies the southern two-thirds of the Cianci parcel and will not easily accommodate other activities at the site.

The northern third of the parcel which lies between the treatment building and Lazy Lane is unused. There are no structures on this section of the property except for several passive monitoring wells which appear as small pipes protruding from the ground. There is a 400-foot frontage along Lazy Lane extending from the railroad ROW on the west to the Quinnipiac river and its wetlands on the east. It is a well-vegetated, level lot characterized by open grassy fields with several mature trees and shrubs which contribute to its appearance as desirable open space along the river. The chain link fence which runs along Lazy Lane at the parcel's perimeter has recently been compromised by on-going utility construction activity by the Town of Southington. The fence will likely be moved 200 - 300 feet back from the road and will physically separate the unused northern section from the section of the property that contains the groundwater extraction and treatment system.

Numerous monitoring wells are situated throughout the former Cianci Property. All have protective sleeves that stand between 2 to 3 feet above grade. A buried 30-inch diameter concrete pipe is present in the central portion of the Site (see 2.3.1 for additional details). A fiber optic communication cable is located just inside of the fence line at the western perimeter of the parcel. The cable location is marked by upright poles with signs. The cable is aligned in a north-south orientation. Utilities available to this parcel include town water, town sewer, telephone, and electricity. A fire hydrant is located at the intersection of Lazy Lane and the access road to the Operations Area, just west of the former Cianci Property entrance.

2.3.3 Potential Future Uses

The southern two-thirds of the parcel will likely remain unavailable for reuse for the foreseeable future due to the presence of the existing groundwater treatment system, extraction wells, and the phytoremediation pilot study.

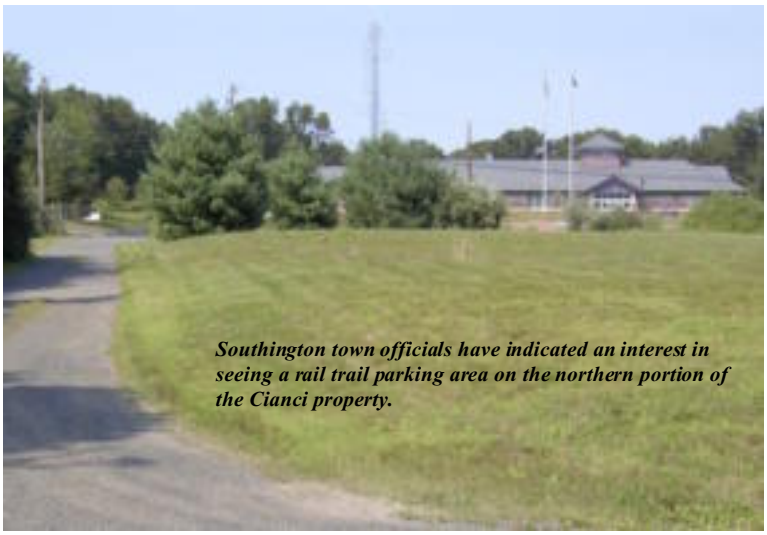
The northern portion of the parcel is not contaminated. The PRP Group has received permission from EPA to relocate the damaged fence back from Lazy Lane, to a position just north of the treatment plant. This action will facilitate the northern portion's redevelopment.

There is currently no area in Southington that provides easy access to the rail trail. Town officials have indicated an interest in seeing a rail trail parking/rest area built on the northern portion of the former Cianci Property. The location directly across from the police station would likely foster security and discourage vandalism. It is easily accessible from Queen Street, therefore increased traffic in a residential area would not be a concern. A parking/rest area could range from simple parking area to a service facility with restrooms, picnic tables and a shelter.

2.3.4 Potential Use/Reuse Issues and Considerations

For the reasons discussed above in section 2.3.3, the southern portion of the former Cianci Property is unlikely to be available for redevelopment. Even if that were not the case, town officials have indicated they would be hesitant to accept a public reuse at a location where waste has been left on the property even if a containment system protects people and the environment from exposure. A widely-held opinion by the public that contaminated sites cannot be safely reused recently precluded the use of a portion of the Old Southington Landfill as a town park. This perception, combined with concerns about the potential liability and costs associated with contaminated properties, discourages the town from seeking ownership.

The eastern perimeter of the former Cianci Property consists of floodplains and floodway associated with the Quinnipiac River. The northern portion of this parcel is mostly outside of the floodplains and floodway, while a larger fraction of the southern portion is situated in floodplains and floodway. Any future land reuse (i.e., new construction) will need to comply with floodplain regulations and local ordinances so that flood storage capacity is not diminished and the floodway is kept free of encroachments.



Southington town officials have indicated an interest in seeing a rail trail parking area on the northern portion of the Cianci property.

Before any reuse of the northern portion of the former Cianci Property can occur, the monitoring wells that are located there would need to be replaced with flush-mounted, locking covers, or properly abandoned in accordance with local and state requirements. Utilities are readily available.

This parcel is located in Southington's Industrial Zone I-2 and in the Enterprise Zone. All future development will need to comply with aquifer protection regulations and requirements.

2.4 Town Well Field Parcel

The Town Well Field parcel is Lot Number 66 on the Tax Assessor Map No. 133, and consists of 28.6 acres. The address of this parcel is Curtiss Street Pumping Station. The Tax Assessor records indicate that the parcel is currently owned by the Town of Southington. Pump houses for Production Wells 4 and 6 are situated on this parcel. Production Well 4 is located in a small paved lot on the northern side of Curtiss Street, approximately 400 feet west of North Main Street. Production Well 6 is located in this parcel approximately 600 feet north of Curtiss Street. Access to Production Well 6 is through a dirt road that originates on a parcel that abuts Curtiss Street; the parcel is approximately 300 feet west of the railroad ROW on Curtiss Street. The pump houses and the well boreholes are intact; there are no pumps currently installed. However, should the town need to start extracting groundwater, pumps can be readily installed.

A Connecticut Light and Power easement is located in the northern portion of this parcel.

NTCRA 2 extraction well in northern portion of town wellfield.

There are two SRSNE extraction wells (NTCRA 2) in the northern portion of this parcel that are active. Groundwater is conveyed by subsurface piping to the treatment plant on the former Cianci Property for the oxidation and removal of VOCs.

There are six groundwater extraction wells with piping and electrical conduits located near the northern perimeter of the Town Well Field parcel. This was the Off–Site Interceptor System installed by SRSNE and is currently not operating.

Access to the Town Well Field from Curtiss Street is unrestricted. In the past, the property has been used by local residents for recreational activities (walking, horse riding).

Utilities available to this parcel are unknown. However, it may be assumed that telephone and electrical service would be available.

2.4.1 Background

This parcel has been owned by the Town of Southington for several decades. Production Well 4 was constructed in 1965 and provided water to the town water supply from June 1966 until December 1997, at an average rate of 385 gallons per minute. Production Well 6 was installed in 1976, and was only pumped intermittently during 1978 through 1980, at an average rate of 100 gpm. Wells 4 and 6 are rated to yield 700 and 1,400 gpm, respectively. The use of the wells were discontinued in 1979 as the result of the detection of VOCs in the groundwater.

2.4.2 Current Uses

This parcel is currently unused for the production of water. It is being used for recreational purposes by Town residents. Based on observed tacks, dirt bikes and ATVs enter into the well field parcel from Curtiss Street along the railroad bed. There is some informal use of the land in the appearance of walking trails and litter. Deer and other wildlife are easily encountered throughout the grassy fields and forested area.

2.4.3 Potential Future Uses

EPA met with Mr. Tom West, the Superintendent of the Southington Water Department on August 25, 2003 to discuss whether there were any future plans for the reuse of the Town Well Field parcel. Productions Wells 4 and 6 are currently unused, but there is a potential for reuse of the wells to provide additional water to Town in the future.

Mr. West explained that Southington has a Registered Diversion of groundwater, which is regulated by the CT DEP. As long as the two production wells are not abandoned, the Town of Southington has the right to use specified quantities of groundwater. The Registered Diversion is considered a valuable asset to the town. If the aquifer is cleaned up to drinking water standards, it could be reused. The town is considering installing another supply well to supplement its potable water supply. The quantity of groundwater allowed by the existing Registered Diversion could be applied to the new supply well.

Previously, the Water Department commissioned its consultant, Metcalf & Eddy, to prepare a set of recommendations for alternatives to replace the water that would have been provided by Production Wells 4 and 6. At that time, the option that looked most favorable was to interconnect with the Town of New Britain's water supply. Since then, New Britain has raised (almost tripled) the price of potable water to be sold to other towns, which has caused the Southington Water Department to reconsider this option. Metcalf & Eddy has been requested to update their previous evaluations and recommendations. Other possible options being considered include interconnecting to another town, connecting to the New Haven Regional Water Authority, or connecting to the Metropolitan District (MDC) system. The MDC is a regional provider of municipal water supply and sewerage services.

Another option being considered is the reactivation of the productions wells, and selling the water to industrial clients for non-potable uses. Additional contamination sources in the vicinity of the wells are still issues that could affect the reactivation of the wells.

Mr. West said that if Southington and the PRP Group settled, then the town may relinquish the Registered Diversions. However, the future outcome is dependent on the signing of a Record of Decision.

This parcel is also located within the Southington Enterprise Zone and could be developed for commercial enterprises. Discussions with Mr. West indicated that any future potential economic development or use would have to comply with local and state regulations governing aquifer protection.

2.4.4 Potential Use/Reuse Issues and Considerations

Use of this parcel as a future well field is uncertain because of the VOCs present in both the overburden and bedrock aquifer units. There are a variety of monitoring wells situated throughout the Town Well Field parcel that will need to be replaced or properly abandoned, should new development occur.

SECTION 3 - GENERAL FINDINGS AND RECOMMENDATIONS

EPA conducted this preliminary reuse assessment of actual or potential future land uses to assist in our evaluation of potential remedies to address the site. The site is at the feasibility study stage, and a wide range of cleanup strategies are being considered.

3.1 Reasonably Anticipated Future Land Uses (RAFLUs)

With the exception of the railroad ROW, which is expected to be converted to expand the northern extent of an existing rail trail, the potential uses of the site remain uncertain.

3.1.1 Operations Area Parcel

Commercial/industrial use of this parcel would be consistent with the current zoning and, assuming the technical details could be worked out with respect to future site cleanup activities, might represent a reasonable reuse option. Current deed restrictions prohibit residential use and use of the groundwater.

Although the Town of Southington has given some consideration to using the Operations Area for a parking lot in conjunction with the rail trail system, there appears to be little support for acquiring the parcel for fear of future liability. Town officials also indicated that concern within the community for the public use of this area if contaminants are left in place would likely create additional resistance.

The current owner, the Estate of Carlton Boll, has not indicated any specific intent to reuse the property.

3.1.2 Railroad ROW

The only reuse scenario for this property that is being discussed by the stakeholders, which include the PRP Group, neighboring residents, town officials, and the CT DEP (which owns the rail corridor), is as an extension to an existing rails-to-trails bike path. Remediation of the railroad bed will likely be necessary before the property can be redeveloped, and the PRP Group has informally committed to incorporate these plans into the remedial design.

3.1.3 Former Cianci Property

The northern portion of the parcel that fronts Lazy Lane may be available for reuse right now with certain limitations. EPA has just approved relocation of the fence closer to the treatment building, which is 200 - 300 feet back from Lazy Lane. There are monitoring wells on that portion of the former Cianci Property that likely would have to be flush mounted prior to redevelopment.

Town of Southington officials have indicated that, while they do not wish to seek ownership of the property, the type of reuse they envision is a parking lot to handle overflow from the new police station across the street and/or access, perhaps with restroom facilities, for the rails-to-trails bike path. As with the Operations Area, commercial or industrial use of this area would be consistent with current zoning, and residential use and use of the groundwater is prohibited by a deed restriction.

The remainder of the parcel is undergoing active groundwater remediation that will likely preclude reuse for well into the future. No plans to reuse the parcel have been put forward.

3.1.4 Town Well Field

Although this parcel is zoned I-2 Industrial, and is located within Southington's Enterprise Zone, the town has no current plans to develop the property. As long as the municipal production wells are open on the books, the Town of Southington will retain their registered groundwater diversions from CT DEP. These diversions are a valuable asset and there is currently no intention to abandon the wells.

As with the southern portion of the former Cianci Property, unless the containment system is reconfigured, it is unlikely that the northern portion of the well field would be available for reuse soon. Town officials have not indicated any intent to change the current use of the southern portion of this parcel.

3.3 Institutional Controls/Use Restrictions

Deed restrictions are attached to both the Operations Area and former Cianci Property that prohibit the use of groundwater or use of the property for residential purposes. Similar deed restrictions will almost surely be needed on the railroad ROW. If the remedy includes capping contaminated soils in the Operations Area and/or ROW, institutional controls protecting the cap will also be needed. Any development or use on the Town Well Field would have to comply with state and local regulations governing aquifer protection.

Other local zoning restrictions would also apply to the parcels, such as: a prohibition on the production of objectionable noise, glare, air pollution, fire hazard or safety hazard, unless a special permit is granted by the Zoning and Planning Commission.

3.2 Project Timing

Additional site characterization is scheduled for November 2003. This information will be used to complete the Feasibility Study, which is expected in June 2004, with a Record of Decision for the site in December 2004. The timing of the availability of the parcels for reuse/redevelopment will depend quite heavily on the remedy that is selected. In particular, the soil and groundwater in the Operations Area is highly contaminated and it is premature to discuss a likely cleanup strategy at the time of this reuse assessment. Depending on the nature of the remedy, this parcel could be available for reuse in as little as 5 years (for a capping/containment remedy), or 8 to 12 years (for a more active remedy). Similar time frames may also apply to the railroad ROW. As discussed above, unless the containment/treatment system were to be reconfigured, it is unlikely that this portion of the Cianci Property will be available for reuse any time in the foreseeable future.

To the extent that specific reuse plans could be prepared prior to the selection or design of the remedy, it may be possible to minimize or eliminate unnecessary impediments to the intended reuses. This is especially important for the Operations Area, and to a lesser extent, the railroad ROW, where extensive future cleanup activities may take place.

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